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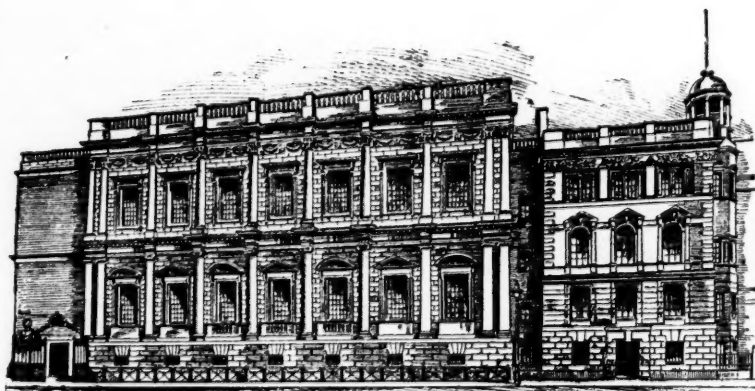
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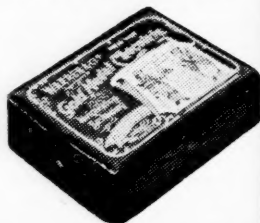
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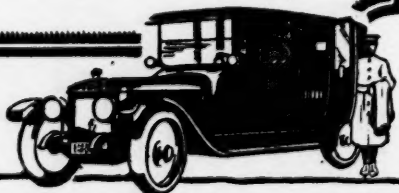
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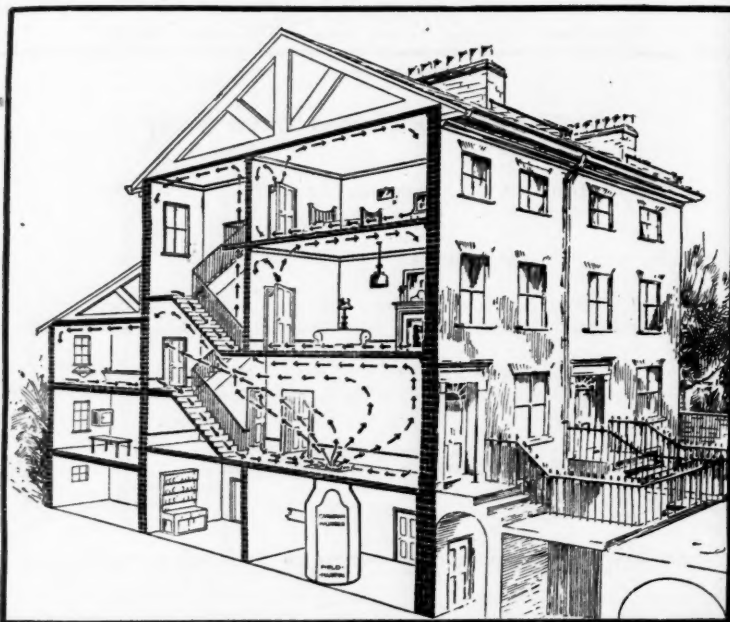
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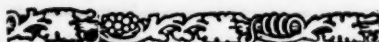
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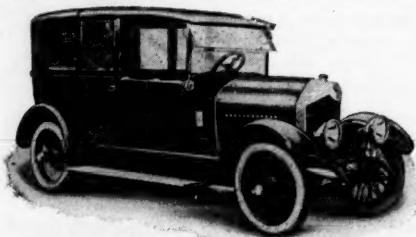
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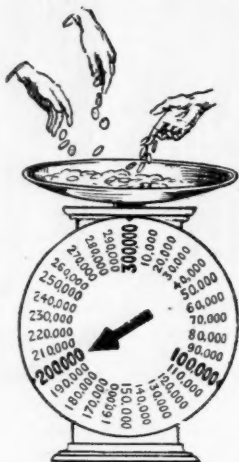
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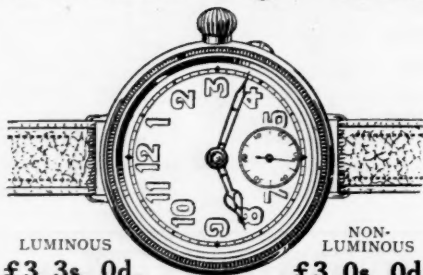
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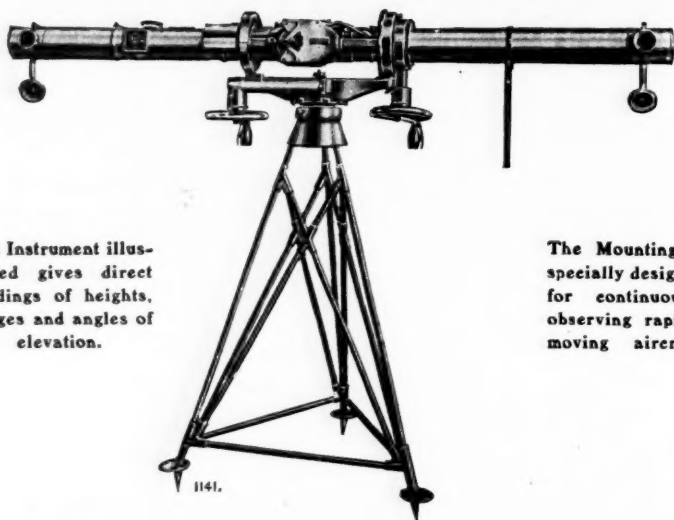
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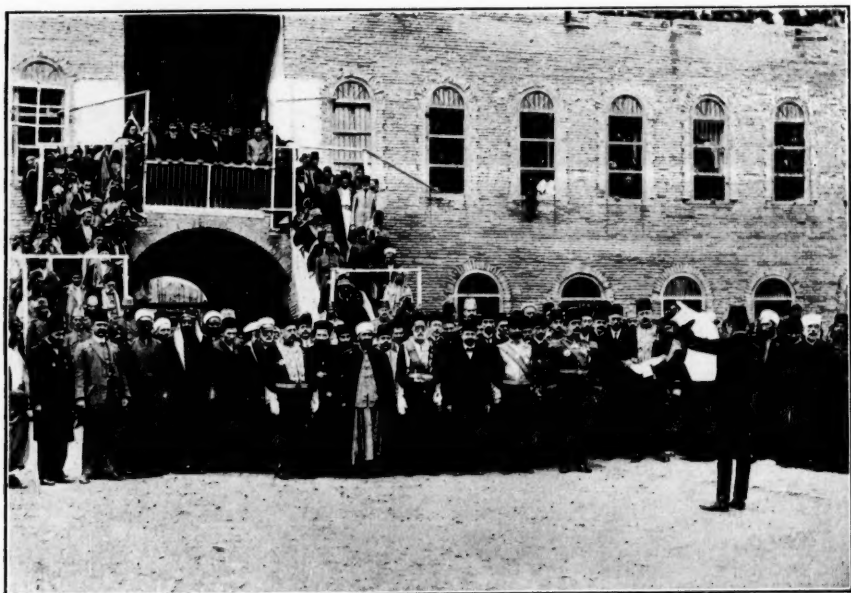
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## SECRETARY'S NOTES.

AUGUST, 1923.

### I. Council.

Captain C. M. Staveley, C.M.G., R.N., and Major-General H. F. Thuillier, C.B., C.M.G., R.E., have been elected Members of the Council under Chapter 4, paragraph 9 of the Bye-laws, Vice Captain The Hon. R. A. R. P. E. Erle-Drax, D.S.O., R.N. and Major-General Sir W. H. Anderson, K.C.B., who have proceeded on Foreign Service.

Major-General Sir J. T. Burnett-Stuart, K.B.E., C.B., C.M.G., D.S.O., has been appointed by the War Office as their official representative on the Council vice Colonel O. H. L. Nicholson, C.M.G., D.S.O.

Captain Lord Tredegar, O.B.E., F.S.A., R.N.V.R., has been appointed an additional Member of the Council to represent the Royal Naval Volunteer Reserve.

### II. Officers joined.

The following Officers joined the Institution during the months of May, June and July, viz :—

Lieutenant M. H. S. Last, Oxfordshire and Buckinghamshire Light Infantry.  
Major A. E. Sanderson, D.S.O., Oxfordshire and Buckinghamshire Light Infantry.

Captain J. Miller, M.C., East Yorkshire Regiment.

Captain J. H. M. Edye, D.S.O., M.C., York and Lancaster Regiment.

Lieutenant H. Percival, R.N.R.

Lieutenant E. M. Dodd, Worcestershire Regiment.

Lieutenant The Right Hon. Lord Louis Mountbatten, K.C.V.O., R.N.

Wing-Commander G. R. Bromet, D.S.O., O.B.E., R.A.F.

Lieutenant E. A. James, Royal Corps of Signals (T.A.).

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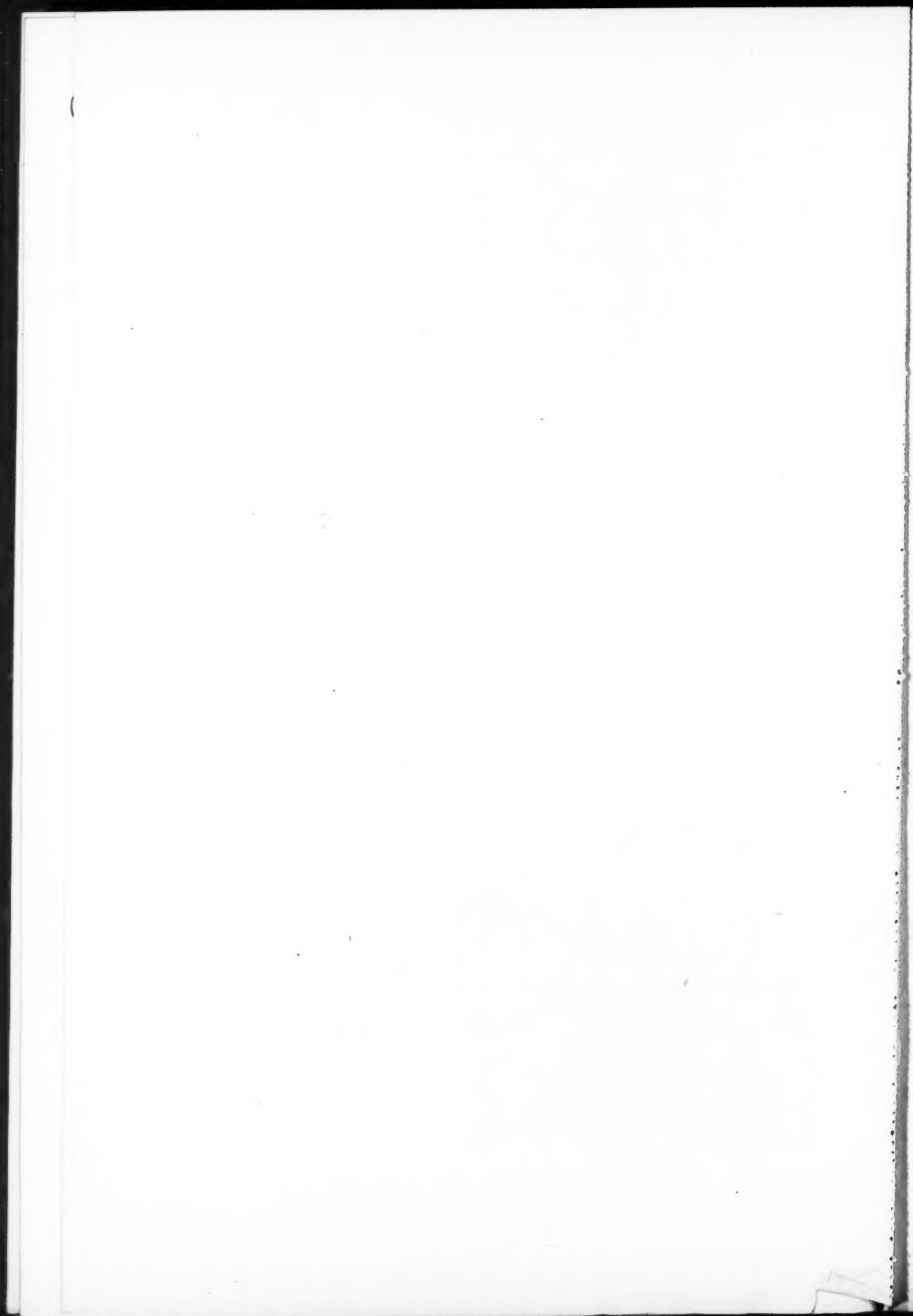
Captain A. L. Collier, M.C., Queen's Own Cameron Highlanders.

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Flight-Lieutenant M. Thomas, D.F.C., A.F.C., R.A.F.

Major A. R. Godwin-Austen, O.B.E., M.C., South Wales Borderers.

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 Major F. St. J. Tyrwhitt, D.S.O., Worcestershire Regiment.  
 Wing-Commander R. J. F. Barton, O.B.E., R.A.F.  
 Captain W. E. Buckingham, M.C., R.E.  
 Lieut.-Commander G. T. Whitehouse, D.S.C., R.N.R.  
 Major J. F. Edwards, South Wales Borderers.  
 Captain D. S. Gordon-Brown, The Black Watch.  
 Captain C. N. Littleboy, M.C., 4th Bn., The Green Howards (T.A.).  
 Captain G. E. Mansergh, M.C., Royal Corps of Signals.  
 Captain J. E. Read, I.A.



Captain G. S. Brewis, D.S.O., the Welch Regiment.  
 Lieut.-Colonel H. A. Carr, D.S.O., late Worcestershire Regiment.  
 Captain J. F. Hare, King's Royal Rifle Corps.  
 Lieut.-Commander O. C. G. Leveson-Gower, R.N.  
 Captain D. G. Moncrieff-Wright, The Cameronians.  
 Lieutenant G. E. Sankey, The Buffs.  
 Major G. E. Wingfield-Stratford, M.C., Queen's Own Royal West Kent Regiment.  
 Captain C. W. P. Ludlow, Somerset Light Infantry.  
 Brig.-General A. R. Burrowes, C.M.G., D.S.O., late Royal Irish Fusiliers.  
 Paymaster-Commander A. F. Stoy, R.D., R.N.R.  
 Lieutenant F. C. Curtis, Royal Corps of Signals.  
 Lieut.-Colonel G. N. T. Smyth-Osborne, C.B., C.M.G., D.S.O., Devonshire Regiment.  
 Flight-Lieutenant C. T. Anderson, D.F.C., R.A.F.  
 Captain T. W. Boyce, M.C., I.A.  
 Captain H. H. Rich, I.A.  
 Captain E. R. Culverwell, M.C., R.G.A.  
 Commander G. C. Dillon, R.N.  
 Lieutenant R. H. P. Addington, R.F.A.  
 Major H. St. G. Hamersley, D.S.O., R.A.S.C.  
 Captain W. A. L. James, I.A.  
 Captain W. E. Smith, D.S.O., R.D., R.N.R.  
 Captain R. R. L. Thom, Bedfordshire and Hertfordshire Regiment.  
 Captain R. B. E. Upton, I.A.  
 Captain H. B. Rose, M.C., Wiltshire Regiment.  
 Captain H. P. Thomas, O.B.E., I.A.  
 Colonel G. C. Williams, C.M.G., D.S.O., late R.E.  
 Squadron-Leader R. Collishaw, D.S.O., O.B.E., D.S.C., D.F.C., R.A.F.  
 Captain G. O. Stephenson, C.M.G., R.N.  
 Lieut.-Colonel C. V. Stockwell, D.S.O., Royal Canadian Horse Artillery.  
 Lieutenant O. G. Woodhouse, Wiltshire Regiment.  
 Lieutenant H. C. Carrigan, Suffolk Regiment.  
 Lieutenant W. A. Dickens, M.C., South Staffordshire Regiment.  
 Captain J. E. French, M.C., Royal Fusiliers.  
 Second-Lieutenant O. L. Jones, Cheshire Regiment.  
 Lieutenant W. V. Morony, Royal Inniskilling Fusiliers.  
 Lieutenant W. P. A. Robinson, M.C., R.F.A.  
 Lieut.-Colonel H. Sidney, D.S.O., T.D., Northumberland Hussars Yeomanry  
 Major H. M. Gale, M.C., R.A.S.C.  
 Captain C. Neville, M.C., R.F.A.  
 Captain A. Peffers, The Cameronians.  
 Flight-Lieutenant C. R. Steele, D.F.C., R.A.F.  
 Lieutenant T. M. Napier, R.N.  
 Major H. B. Vernon, M.C., I.A.  
 Second-Lieutenant P. D. S. Palmer, Leicestershire Regiment.  
 Captain C. L. Rougier, M.C., Lancashire Fusiliers.

### III. The Editorship.

Colonel H. C. Wylly, C.B., will terminate his appointment as the Editor with the November *Journal*. The Council ask for applications for the post from

Members of the Institution of all branches of the Service, which must be received by the Secretary on or before 29th September, 1923.

A candidate must have a competent knowledge of French and German, but will be afforded assistance with regard to other languages; must be prepared to compile the notes of the branch of the Service with which he is connected; will not be required to devote the whole of his time to Institution work. The age will be governed by the Council Standing Orders as to the retirement of members of the staff of the Institution at the age of 60. The salary appertaining to the appointment is £50 per issue of the *Quarterly Journal*.

#### IV. The Fortescue History Fund.

	£	s.	d.
Amount already acknowledged ... ..	262	15	6
Major-General A. G. Wauchope, C.B., C.M.G., C.I.E., D.S.O.	1	0	0
Officers' Mess, 1st Bn., Border Regt. ... ..	2	2	0
	<hr/>		
	£265	17	6

At the Meeting of the Council held on Tuesday, 3rd July, it was now decided to close this fund.

The following letter has been received from The Hon. J. W. Fortescue, C.V.O.:—

Admiral's House,  
Hampstead Heath,  
N.W. 3.

Dear Sir Arthur Leatham,

16th July, 1923.

It is only through you that I can express my acknowledgements to the gentlemen who have so generously subscribed to the fund for the support of my History of the Army. May I ask you, therefore, to be kind enough to tender to them from me my best and most grateful thanks. Their kind help has tided me over a trying and difficult time, the fruits of which are a new volume, which has passed through the press and should appear very shortly. I have now every hope that I may complete the History according to my original plan, and I shall never forget that at a very critical period I was heartened and encouraged to continue work upon it by the sympathy and help of the officers of the Army.

Yours sincerely,  
J. W. FORTESCUE.

#### V. Museum Purchase Fund.

This Fund has been opened with the object of purchasing suitable exhibits which are from time to time offered to the Museum, or which are put up for sale at various auctions. The Council hope it will receive support from Members of the Institution who are interested in the Museum.

	£	s.	d.
Amount already acknowledged ... ..	60	3	0
N. A. H. Budd, Esq. ... ..	10	6	
	<hr/>		
	60	13	6
Less Expended to date ... ..	35	0	10
	<hr/>		
	25	12	8

# VI. Lectures.

The Lecture Card for the Session 1923/24 is approaching completion and will be issued to Members towards the end of September.

# VII. Gold Medal Essay (Naval) 1923.

The following Essay has been received :

- (1) " I shall tell you what some have observed, and I have found it the real truth."

Officers intending to submit essays are reminded that the last date on which such essays can be received is 15th November next.

# VIII. The Museum.

The amount taken for admission to the Museum during the past quarter was :—

- £87 1s. od. in May.
- £94 6s. 9d. in June.
- £90 15s. 9d. in July.

## ADDITIONS.

- (7767) The following uniform of the 46th Punjab Infantry (1900 to 1922) : Officer's Tunic, Overalls, Mess Jacket, Vest and Fatigue Cap. —Given by Colonel G. P. Ranken (the first Commandant of the Regiment).
- (7768) Bronze Medal struck in Berlin for presentation to the German Troops who put down the revolution in 1918 : the Medal was not issued.—Given by Major-General Hon. Sir F. R. Bingham, K.C.M.G., C.B., R.A.
- (7769) Badge of the Leith Trinity House Artillery Volunteers. A small Corps of Artillery Volunteers commanded by Captain J. Hay, whose commission was dated 4th February, 1805.—Given by Colonel G. P. Ranken.
- (7770) A Model, in silver, of " an improved fog-following buoy " known as *Hydroplane*, which was largely used by steamers for station-keeping when in convoys during the Great War, in place of the cumbersome barrel attached to a hawser. It proved most successful and, being light, floated easily at the end of a small wire.—Given by Captain A. E. Dunn, C.B.E., R.D., R.N.R.
- (7771) Full-dress Helmet of the Worcestershire Yeomanry about 1850.—Given by the Rev. W. H. G. Twining, M.A.
- (7772) Walking Stick formed from the jaw of a Sword Fish, which was taken at the Palace of Tippoo Sahib after the storming of Seringapatam in 1799. On a gold band is recorded its story.—Bequeathed by Mr. T. H. Babbage, who formerly served in the Bombay Fusiliers.
- (7773) A collection of Regimental Buttons (17) of the 71st Highland Light Infantry and 74th Highlanders, 1786 to 1870 : now 1st and 2nd Battalions Highland Light Infantry.—Given by Brig.-General Sir Alfred Balfour, K.B.E., C.B., late 71st H.L.I.

- (7774) A frame containing portions of an old Regimental Colour of the 56th Regiment (mounted on new silk) together with the head of the Colour-pole, of curious regimental design. Transferred from Kilmainham Hospital, Dublin, in 1922. Given by the General Officer Commanding in Chief, Ireland.
- (7775) A pair of percussion pistols which formerly belonged to Field-Marshal Sir Richard Dacres, G.C.B. He joined the Royal Artillery in 1815 and served with distinction throughout the Crimean War, retired in 1869 and subsequently became Constable of the Tower and the Master Gunner of England.—Given by Mrs. Dacres Thomas.
- (7776) Officer's Pouch-belt plate of the 3rd Madras Native Light Infantry, 1857.—Given by Lieut.-General F. H. Tyrrell.



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[Authors alone are responsible for the contents of their respective Papers. All communications (except those for perusal by the Editor only) should be addressed to the Secretary, Royal United Service Institution.]

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**THE BATTLE OF VELEZ MALAGA, 1704.**

By L. G. CARR LAUGHTON, Esq.

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On Wednesday, 6th December, 1922, at 3 p.m.

REAR-ADMIRAL H. W. RICHMOND, C.B., in the Chair.

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THE CHAIRMAN: Ladies and Gentlemen, I will not waste your time by making any remarks now. All I have to say is that Mr. Carr Laughton has prepared a Paper on the Battle of Velez Malaga, a battle about which I think there is very little known—a battle which has been talked about in a very contemptuous manner, and in a manner which, I think we shall find, the battle does not deserve. With these few remarks, I will ask Mr. Carr Laughton to give his lecture.

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**LECTURE.**

LITTLE more than thirty years ago it was still common opinion in the Navy that steam had changed the conduct of war by sea so much that we had nothing to learn from past history. The historical writers, however, who came forward at that time, and especially Captain Mahan, soon brought men to see that the principles of strategy are eternal; and recent experience of naval war has strengthened them in that belief. Naval history is now accepted as the school in which naval strategy is to be studied.

Opinion has not yet decided that the tactical study of the naval history of the sailing era is of living value. That it is of interest is no

doubt conceded; but the interest seems to be personal and antiquarian rather than technical. We want to know enough of the tactics of his age to decide whether Rodney, in cutting the line on the 12th April, showed tactical genius; and we want to know how the personality of Nelson manifested itself at Trafalgar in the Nelson touch. But it occurs to few to ask whether these men were guided by fundamental principles which may still be active in modern conditions.

In undertaking the study of the tactics of Velez Malaga, and its relationship to antecedent battles, I have been prompted chiefly by the desire to learn whether they do disclose principles which are of permanent value.

#### THE PLACE OF THE BATTLE IN THE CAMPAIGN OF 1704.

The immediate cause of the battle of Velez Malaga, fought on 13th August, 1704, was the taking of Gibraltar, which stirred the French and Spaniards into attempting its recapture. The history of the campaign as a whole is so fully set out in Sir Julian Corbett's "England in the Mediterranean," that very few words are needed to set the board. The Count of Toulouse with the French Grand Fleet had sailed from Toulon before Gibraltar was attacked. It was expected that the Anglo-Dutch fleet would be found, or at least heard of, at Barcelona, and thither Toulouse steered. What he did learn on his arrival there was that Gibraltar had fallen, that Rooke was in the neighbourhood of the Straits, where he went at once to seek him. He got contact with Rooke on the 9th August, between Malaga and Gibraltar, returned to Malaga to pick up his galleys, and engaged the allied fleet on the 13th. Neither side was anxious to renew the battle, and Toulouse, after taking his galleys back to Malaga, returned to Toulon.

The effect of the battle was, therefore, that Gibraltar was not retaken; for the squadron which was left at Cadiz with De Pointis was quite unable to face the larger force under Leake which was based on Lisbon. The fortress, being supported from the sea, could not be retaken from the land. There was also a further result, for from this time to the end of the war France never again fitted out a fleet. The course which the war took in its later years, and the naval and commercial supremacy of Great Britain which resulted from it, may, therefore, not unfairly be ascribed in great measure to the result of this battle.

This is not a bad result for a battle the conduct of which has met with very general condemnation. Mahan, for instance, says<sup>1</sup>: "The battle of Malaga possesses no military interest, except that it is the first in which we find fully developed that wholly unscientific method of attack by the English which Clerk criticised. . . . The degeneracy from the able combinations of Monk, Ruyter and Tourville to

<sup>1</sup> "Influence of Sea Power on History," 211.



the epoch of mere seamanship is clearly marked by the battle of Malaga, and gives it its only historical importance." This verdict has been very commonly endorsed without critical examination; only Sir Julian Corbett has taken a more favourable view of Rooke's conduct.<sup>1</sup> No modern French writer has yet dealt with the battle. For myself, in addition to the somewhat extensive literature of the subject, I have studied the logs of all the English ships present. As the result of this, I am farther than ever from agreeing with Mahan's dictum that the battle "possesses no military interest."

#### MOVEMENTS OF THE FLEET AFTER THE FALL OF GIBRALTAR.

After the capture of Gibraltar on 24th July, Rooke's fleet was weakened by the necessity of detaching ships, and finally amounted to 41 English and 12 Dutch of the line. Rooke had considerable difficulty in keeping the Dutch with the flag, and on the 28th July wrote thus to the Admiralty<sup>2</sup>: "The Dutch are looking home with their whole squadron, they having now sent away the rear-admiral with 6 ships, which is more than a third of their strength, to Lisbon and so on to Plymouth; so that by this, the Tercera detachment, and other necessary services that will require ships being sent from the fleet, you must not depend on a superiority to the enemy . . . . and I wish the Dutch not performing their stipulation in the quota of their ships do not at one time or another draw us into fatal misfortunes."

The fleet went over to the African coast to water; but, though the wind was light, there was an easterly swell which caused some delay. Thus, when Rooke weighed on the 8th, twelve ships had not completed their supply and were left behind at Ceuta. At dawn on the 9th the "Centurion" came in from to windward with news that the enemy's fleet was 30 miles away and steering west. Byng, who first saw the signal, went on board to Rooke with the news, and the situation was discussed by Rooke, Byng, and Sir James Wishart, who was Rooke's first Captain.

Wishart was for falling back on Gibraltar and anchoring there. Byng disagreed, alleging that to do so would expose the ships at Ceuta to be cut off, and arguing that it would be dangerous to receive the enemy at anchor. A Council of War was, therefore, at once held, and decided to meet the enemy at sea.

It has been suggested that if Toulouse had attacked as soon as possible after gaining contact on the 9th, he would have had Rooke at a disadvantage, for the ships at Ceuta would not have been able to join. This is extremely doubtful. Even if Rooke had not fallen back, the fleets could not have been in presence of each other, and formed,

<sup>1</sup> "England in the Mediterranean," II., 268-273.

<sup>2</sup> S. P. Dom., Naval, No. 7.



till too late on the 9th to make a battle possible. As it was, the 12 ships joined on the 10th, with Rooke keeping his course to windward. The event, therefore, seems to prove that in no case could Toulouse have caught Rooke at less than his full strength.

#### ATTACKS ON A FLEET AT ANCHOR.

It is worth while, however, to pause a little to consider Wishart's suggestion, and to ask why it met with so decided a negative. It will be remembered that in the later wars of the eighteenth century—the most familiar period of our naval history—a fleet at anchor in such a position that its ends could not be turned was held to be very strongly posted, so strongly in fact that its enemy often refused to attack it. There were many instances of this: for instance, Howe inside the bar at Sandy Hook in July, 1778, when d'Estaing refused to attack; Barrington at the *cul de sac* of Sta. Lucia, in December of the same year, also successfully defied d'Estaing; in August, 1781, Darby anchored 30 ships of the Channel Fleet in Torbay, and Cordova with the Franco-Spanish fleet of 49 could not be persuaded to attack; while Hood's masterly dispositions against De Grasse at St. Kitts in January, 1782, confirmed the belief that a fleet so posted was all but impregnable. So, too, in June, 1794, Hood, with 13 of the line, did not attack Rear-Admiral Martin, anchored in Golfe Juan with seven. That Hood intended to attack is certain; but the French could not know this, and it is not, therefore, remarkable that Brueys, three years later, anchored his squadron in Aboukir Bay and allowed Nelson to attack him there. That his defeat was by no means a foregone conclusion is proved both by the antecedent examples and also by subsequent experience. The attack on Linois by Saumarez at Algeciras in 1801, and the battle of Copenhagen in the same year, tend to emphasise the extraordinary nature of the achievement of the Nile; so, too, does Lord Gambier's reluctance to attack the French in Basque Roads in 1809.

But in the 17th century the conditions were different. Even in northern Europe, where galleys were not used, the fear of fireships was so great that no fleet would allow itself to be attacked at anchor. Thus the Duke of York got under way from Solebay on 28th May, 1672, as the Dutch approached; and so too, exactly a year later, De Ruyter weighed in the Schooneveld and fought Rupert and D'Estrées under sail. In Southern Europe and the Mediterranean the case against lying at anchor was even stronger; for there the fireship was supplemented by the galley, which, by towing her to a position favourable for attack, could make surer work. Thus the French destroyed a Spanish squadron at Guetaria in 1638; and again in 1676, after De Ruyter's death, ruined the Dutch-Spanish fleet which was anchored outside Palermo. This example was very well remembered; and, though most of the English officers had little experience of galleys, we

may be sure that at the Council of War held on 9th August, 1704, the Dutch admirals were emphatic in condemning the proposal to anchor.

## LISTS OF THE FLEETS.

*Van.*THE ALLIES.  
(White.)FRENCH.  
(White and Blue.)

Ships.	Guns.	Captains.	K.	W.	Ships.	Guns.	Captains.
Yarmouth -	70	Gasper Hicks -	7	26	Eclatant -	66	De Belle Fontaine
Norfolk -	80	John Knapp -	15	20	Eole -	62	De Mons
Berwick -	70	Robert Fairfax -	23	24	Oriflamme -	62	Château-Renault
Prince George	90	{ Sir John Leake, V.B. } Stephen Martin	15	57	St. Philippe -	92	D'Inreville, V.A.
Boyne -	80	Lord Dursley -	14	52	Heureux -	70	Colbert St. Mars.
Newark -	80	Richard Clarke -	15	32	Rubis -	56	De Benneville
Lenox -	70	William Jumper -	23	78	Arrogant -	56	Des Herbiers
Tilbury -	50	George Delavall -	20	25	Marquis -	58	Pastoulet
Swiftsure -	70	Robert Wynn -	13	33	Constant -	70	De Ste.-Maure
Namur -	90	Christopher Myngs -	18	44	Fier -	88	De Villette, A.
Barfleur -	90	{ Sir Cloudisley Shovell, A.W. } James Stuart	6	24	Intrépide -	84	Du Casse
Oxford -	70	John Norris -	6	9	Excellent -	62	La Roche-Allart
Assurance -	66	Robert Hancock -	6	14	Sage -	62	Monbault
Nottingham -	60	Samuel Whitaker -	7	19	Eceuil -	66	Davigny
Warspite -	70	Edmund Loades -	17	44	Magnifique -	86	De Belle-Isle- Erard, R.A.
3 Fireships.					Monarque -	86	Chabert
					Perle -	54	Montgon
					12 Gallies.		
					4 Fireships.		
					2 Repeating frigates.		

*Centre.*THE ALLIES  
(Red.)FRENCH.  
(White.)

Ships.	Guns.	Captains.	K.	W.	Ships.	Guns.	Captains.
Burford -	70	Kerryll Roffey -	11	19	Furieux -	62	De Blenac
Monck -	60	James Mighells -	36	52	Vermandois -	60	De Béthune
Cambridge -	80	Richard Lestock -	11	27	Parfait -	74	De Château-
Kent -	70	{ Thomas Dilkes, R.W. } Jonas Hanway	15	26	Tonnant -	92	Morand De Coëtlogon, V.A.
Royal Oak -	80	Gerard Elwes -	20	33	Orgueilleux -	86	Du Palais
Suffolk -	70	Robert Kirton -	13	38	Mercure -	50	De Lanion
Bedford -	70	Sir Thomas Hardy -	12	51	Sérieux -	58	Champmeslin
Shrewsbury -	80	Josias Crow -	31	73	Fleurion -	56	De Grancey
Monmouth -	70	John Baker -	27	67	Vainqueur -	88	Bailli de Loraine
Eagle -	70	Ld. Archibald Hamilton	7	57	Foudroyant -	104	Cte. de Toulouse, A.
Royal Catherine	90	{ Sir Geo. Rooke, A.F. } Sir James Wishart, 1st Capt. John Fletcher, 2nd Capt.	27	94	Terrible -	100	De Relingues
St. George -	90	John Jennings -	45	93	Entreprenant -	60	D'Hautefort
Montagu -	60	William Cleveland -	15	34	Fortunée -	58	De Bagnaux
Nassau -	70	Francis Dove -	15	26	Henri -	66	De Serquigni
Grafton -	70	Sir Andrew Leake -	31	66	Magnanime -	74	De Pointis, R.A.
					Lys -	88	De Villars
					Fendant -	58	De la Luzerne

## THE BATTLE OF VELEZ MALAGA, 1704

*Centre*—continued.

## THE ALLIES.

## FRENCH.

(Red.)

(White.)

Ships.	Guns.	Captains.	K.	W.	Ships.	Guns.	Captains.
Firme -	70	Baron Wyld -	25	48	4 Galleys.		
Kingston -	60	Edward Acton -	14	46	2 Fireships.		
Centurion -	50	John Herne -	10	33	2 Repeating frigates.		
Torbay -	80	William Caldwell -	21	50			
Ranelagh -	80	{ George Byng, R.R. }	24	45			
Dorsetshire -	80	{ John Cowe }	12	20			
Triton -	50	Edward Whitaker -	5	21			
Essex -	70	Tudor Trevor -	13	36			
Somerset -	80	John Hubbard -	31	62			
		John Price -					
Panther -	50	Hon. Peregrine Bertle -	10	16			
Swallow -	50	Richard Haddock -	1	3			
2 Bombs.							
4 Fireships.							
3 Frigates.							

*Rear.*

## THE ALLIES.

## FRENCH.

(Dutch.)

(Blue.)

Ships.	Guns.	Captains.	K.	W.	Ships.	Guns.	Captains.
Wapen v. Vriesland	64	C. Middagten -			Ardent -	66	D'Allgre
Wapen v. Utrecht	64	Bolck -			St. Esprit -	74	Duquesne-Guitton
Graaf v. Albemarle	64	{ Lt. Adm. Callen- burg }			Triomphant -	92	De la Harteloire, R.A.
Vliessingen -	50	{ Visscher }			Toulouse -	62	Duquesne-Mosnier
Damiaten -	50				Maure -	52	St. Clair
Leeuw -	64						
Bannier -	64	J. W. van Ghent	Ca.	Ca.	Content -	60	Phéliepeaux
Nijmegen -	74	H. Lijnslager -	100	300	Trident -	56	De Modène
Katwijk -	72	J. C. Ockersse -			Sceptre -	88	D'Ailli
Unie -	90	Baron van Wassenae, V.A.			Soleil Royal -	102	De Langeron, A.
Gelderland -	60	P. Schrijver -			Invincible -	70	De Rouvrol
Dordrecht -	72				Gaillard -	54	D'Osmond
1 Frigate.					Diamant -	58	La Roque
1 Fireship.					Cheval Marin -	—	De Pontac
					Couronne -	78	De Champigni
					Admirable -	92	De Sepville, V.A.
					St. Louis -	60	De Beaujeu
					Zélande -	60	De Ferville
					8 Galleys.		
					3 Fireships.		
					2 Repeating frigates.		

## LISTS OF THE FLEETS.

(A) *The Allied Fleet*—There are few doubtful points about the English part of this list; for logs exist for all ships except the "Prince

George" and the two bombs.<sup>1</sup> Most lists give as present several ships which had been detached, notably the "Charles" galley, the "Garland" and the "Roebuck," all belonging to the frigate line. All of these were away from the fleet. The order of the Dutch ships in the line is uncertain. The statement of the Dutch small craft present depends on the "Life of Leake": some of them, including the bombs, had been left at Gibraltar.

(B) *The French Fleet*.—The lists available at present are not very satisfactory. For a perfect list we must wait till M. de la Roncière and M. Lacour-Gayet publish the next volumes of their histories. That which is here given follows Brun in the main for the line of battle; the small craft are from the Torrington Memoirs.

A point of some note is that I have reversed the order of the French rear squadron, making the vice-admiral's division the rear-most. All the available lists place it the other way, with the rear-admiral's division closing the line; but this is entirely opposed to what was then, and had been for many years, the regular practice in the French as in all other navies.

No detailed list of French losses, save of officers, has been published.

Both fleets had also a few other small craft of no fighting value, such as despatch vessels and hospital ships.

It is of interest that at this period, in a fleet action as well as in other operations, an attempt was made to co-ordinate all existing types and to employ them together as a single force.

It has been commonly noticed that, although on paper the fleets were of very equal force, yet the French had a distinct advantage. They were newly out of harbour, and their ships were clean; the Allies were six months from home, and their ships were foul in consequence. The French had full complements; the Allies, owing to losses during the campaign and to their having left 1,000 marines for the defence of Gibraltar, were about 2,000 men short of their full crews. What was even more important was that the English were short of ammunition. They came out from England with 40 rounds per gun: they expended some at Barcelona, much more at Gibraltar, and at Malaga had 25 rounds per gun, though this does not seem to have been very evenly distributed. It is common knowledge that several ships exhausted their supply during the battle and had to haul out of action accordingly. When, after the battle, the powder and shot that were left were evenly distributed, the ships were supposed to have about 10 rounds per gun. If, therefore, the battle had been renewed on the following day, they would have been by no means so defenceless as the "Life of Leake," and other contemporary accounts, allege. Ten rounds per gun is certainly more

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<sup>1</sup> For the guns of the English ships I have followed Leake's list. The list in Clowes gives the "War at home" establishment, and almost certainly overstates their force.

than half as much as they used on the 13th, which was remarkable as a day of particularly hard and sustained fighting.

The rate of fire at Malaga can be deduced roughly from the expenditure of ammunition. The ships used 25—10, that is 15 "rounds." Rounds were computed for all guns, thus 15 "rounds" are equal to 30 broadsides. We can take it that, allowing for ships leaving the line, or remaining disengaged, each ship was in action for about six hours on an average. Therefore, the rate was approximately equal to about five broadsides per hour, and perhaps was rather less.

#### NOTE ON THE DIAGRAMS.

In the diagrams of Velez Malaga all flags are shown hatched in their proper colours, *i.e.*, vertical lines for red, horizontal for blue. In those of Schooneveld I. and Beachy Head, only the flags of the admirals commanding the grand squadrons are shown. In every case the flag of the C.-in-C. is drawn big; the flag of an admiral of a grand squadron is smaller; and those of the subordinate admirals commanding sub-squadrons, whether they be vice- or rear-admirals, are shown smaller still.

#### REMARKS ON THE COMPOSITION OF THE FLEETS.

(A) *The Line of Battle.*—In 1704 the 50-gun ship was the smallest which was admitted to the line of battle; and, at any rate in our Service, it was already regarded as being "below the line." Shovell had four such ships, of which he took two out of the line and stationed them to windward with the frigates to act against the enemy's galleys if necessary. It was not necessary; and in the crisis of the action these two 50's were ordered to fill gaps in the line, and did so. It is worth noticing that the other two 50's, the "Centurion" and "Triton," were employed as cruisers immediately before the battle. The "Centurion" was with the frigates when the French fleet was first sighted; the "Triton" was one of the cruisers which kept touch with the enemy during the night of the 12th to the 13th. The Dutch had two 50's; the French had 12 or 14 ships of about 54 guns.

On the other hand, the French were superior in heavy ships, having three first-rates and about a dozen second-rates; against which the Allies had no first-rates and only six second-rates. This fact had an important influence on the result of the battle. The Allies were superior in third rates of 70 and 80 guns, the type which was rapidly becoming the standard line-of-battle ship.

Thus, although the aggregates of guns were almost exactly equal, there was a considerable difference between the two lines. There were nine flags in the French fleet, and the system, already well-established, of giving each flag two powerful ships as its seconds, resulted in the French fleet's being arranged roughly in groups of three throughout its length, a strong group and a weak group alternately. The strongest



group, that of the C.-in-C. and his seconds, mounted about 290 guns; but, on the other hand, there were three groups each mounting about 160 guns. In the Allied fleet the highest group mounted 250, and there was only one group mounting as few as 180. The effect of this will be commented on later.

It seems worth mentioning that this was the first battle in which the English fleet was not fully organised by the squadronal colours, according to the system which had been developed during the Dutch Wars. There were three flags in the centre, the C.-in-C. with the Union and two rear-admirals, one of the Red (Byng), the other of the White (Dilkes). The admiral of the van had the white flag (Shovell), but he had only one subordinate flag (Leake), who was vice-admiral of the Blue.

(B) *Ships not in the Line.*—Of the ships not in the line the French placed 12 galleys and 4 fireships in the van, 8 galleys and 3 fireships in the rear, and only 4 galleys and 2 fireships behind the centre. Some English observers thought that there were fewer galleys in the centre because the line was strongest there. Rooke interpreted it also as a menace to tow the fireships round the ends of the line and into a position to windward from which they could be launched against the Allied line. For this reason he strengthened his weak frigate line, making it up to six ships, so that if the galleys and fireships did come, "they might give them some diversion." They did not come, for there was not enough wind to give the fireships a chance.

It should be noticed, however, that this combination of galleys and fireships was new to an English fleet. The Dutch had met it before, especially in the last campaign of De Ruyter, when they had an unhappy experience of it. We may be sure that they impressed the danger of it on Rooke; and from Rooke's dispositions it may be inferred that he acquiesced.

There were other novelties in this fight. The French used their frigates to repeat signals, a thing which was noticed and commented on in the English fleet. "Some of their small frigotts lay to leeward of their line, with the same signall colours their flag ships had; which Adm. Byng judged the use of to be, that if in time of action the smoak should be so great that their line could not see the signalls from the flag ships, the fleet might observe them from these frigotts lying at a distance, by repeating the signalls made; and which disposition he has thought might be of great use in large fleets where the line is much extended."<sup>1</sup> If the French used this method at Barfleure, it was at least not noticed; but it is more probable that their method in 1692 was what it had been two years earlier. At Beachy Head every eighth ship in the French line was ordered to repeat signals.

A curious point is that the use of repeating frigates had been suggested by an English sea-officer 15 years before. His opinion on

<sup>1</sup> Torrington Memoirs, 185.

the subject is added as an "Observation" to a set of the Duke of York's Fighting Instructions of 1673. From internal evidence it can be proved that the MS. was written in 1689, but it is not known who was the author; but from the fact that this, and other important suggestions of his, were not carried into effect, it may perhaps be inferred that he was either a man of comparatively junior rank, who never got a chance of pushing his ideas, or that he died soon after he compiled the volume. This is the volume to which Sir Julian Corbett, in "Fighting Instructions," referred under the title of "The Admiralty Manuscript."<sup>1</sup>

Another novelty was present in the shape of bomb vessels, of which the Allies had two. All accounts are agreed as to this, and all French accounts agree that they were of considerable service. No English account, on the other hand, mentions their having done anything. They are not referred to either in the official report of the battle, nor in the log of any ship which was present. Curiously enough, no logs or journals of these two ships exist, though (with the one exception of Leake's flagship) either the log or the journal, and in most cases both, for every other ship present has been preserved. Sir Julian Corbett says that the English denied that bombs were used; but I have met with no explicit denial, only absolute silence. Yet the French evidence seems strong, for Villette says definitely that a bomb came down on the poop of his flagship, went down through three decks, blew out half the stern, and set the ship on fire. Nothing but a bomb could do damage like that. There are many French references also to other ships having been damaged by bombs, but these seem less certain. The French "Relation," which was published in the *London Gazette*, credits them with still further service: "About 3 two frigates advanced towards our Admiral which were taken to be fireships that were endeavouring to come up to us by the favour of a very great fire which Admiral Rooke and his second made upon him, but they were two bomb ketches that fired several bombs at him, as was observed from the frigates which we had on each wing, for we could not so well discern it by reason of the great fire."

As to this, I notice three things: one, that we had only two bomb ketches present, the Dutch bombs having been left at Gibraltar; two, that at this same time they were, by all other accounts, very busy in the van with Villette and the ships about him; three, that at this very time the two 50-gun ships from the English frigate line were called into the line of battle and took station one as Rooke's second, the other two ships away from the flag.

#### AN ACCOUNT OF THE BATTLE.

Although the two lines were numerically equal, their division into squadrons was different. The French had 17 ships each in their Van,

<sup>1</sup> [N.R.S. "Fighting Instructions," 152.] It is in the Admiralty Library: Press mark Ec 39.



Centre and Rear, each of which was composed of three subdivisions; the Allies had 15 ships in the Van, in two subdivisions, 24 in the Centre, in three subdivisions, and the 12 Dutch ships in the Rear in two subdivisions. Thus, when the fleets were ranged exactly abreast of each other, the English centre would overlap the French centre by two ships ahead and by five ships astern. The arrangement is shown in Diagram I., in which the figures set against the flagships shows how many ships each was from the head of the line. In this diagram, AB is the van, BC the centre, and CD the rear of each fleet. At one time or another during the engagement, most of the ships were matched against their opposite numbers in the enemy's line. The diagram explains the French complaint that a flagship did not, as a matter of course, find a flagship for her opponent.

Having discovered the enemy to the westward of them about noon on the 12th, the Allies stood towards them during the afternoon and night, the wind being easterly and very light. At dawn on the 13th the French were seen 6 miles to leeward, their centre bearing W. by N. from Rooke. They were forming their line with their heads to the southward; and, having formed it to their satisfaction, they braced their headsails to the mast and lay to to await the attack. Their line was neither close-hauled nor was it straight: it had the wind abeam, and it was, whether by accident or design, so far curved to leeward that some English observers styled it a half-moon.<sup>1</sup> Rooke came down in line abreast almost exactly before the wind.

It seems to have escaped notice, in connection with this battle, that to approach an enemy thus, especially in a light wind and if he was lying-to, was a dangerous thing to do. With the enemy stationary it was easy enough to stand for him, squadron to squadron and ship to ship as desired; but to approach within effective range was more difficult, for coming down end on the attackers were liable to be raked while they could make no answer. This difficulty had made itself felt in the battle of Beachy Head.

About 9 o'clock the Allied van got within gunshot of the French van, but it could not get nearer. If it went down end-on, it would be raked; and when it tried to edge down, the French filled and edged away too, keeping their formation. This opened up a gap between the Allied van and centre, which Toulouse now tried to turn to advantage. The French apparently set their mainsails and made sail, the van on a wind, the centre hauling to the wind together; the van aiming at forereaching on Leake in order to weather him; the centre at passing through the gap. (In Diagram II. the gap was about at F. The plan is a rough indication of the position after this movement had been abandoned, and the fleets had engaged.)

Not a shot had yet been fired. Rooke was still edging down and had come to about half-gunshot of the French centre when it went

<sup>1</sup> Journals of "R. Katherine" and "Lightning."

ahead. Finding himself dropping astern, he hauled up and made the signal for battle. That the French centre had forerached on him considerably is proved by the fact that the first ship to engage Toulouse's flagship was the "Bedford," the sternmost ship of Dilke's division. She was the twenty-second ship in the Allied line, and should have been five ships ahead of Toulouse.

The battle almost immediately became general, except in the extreme rear. It has so commonly been repeated that the Dutch formed the rear, and that they were late in getting into action, that it comes as something of a surprise to learn that "Our Admiral made the signal to engage; upon which the rear began to fire, and then all the fleet engaged."<sup>1</sup> The logs show quite clearly what happened in the rear. Byng's division was accounted as forming part of the rear; nothing is to be learnt from the log of its leading ship, but its second ship, the "Kingston," logged: "At  $\frac{1}{4}$  past 10 the Admiral made the signal to fall on them. We began to fire in the rear, and by 11 all our fleet were engaged." "All our fleet" means all the English fleet, and does not necessarily include the Dutch. The Dutch Admiral's division was fairly close up, and engaged early; but it was not quite in its proper position, for it was a little to windward of Byng and partly overlapped him, so that the headmost Dutch ships were for a time firing over the sternmost of Byng's. In Diagram II., C marks the division between Byng's squadron and the Dutch; E indicates the Dutch Admiral's, and G the Dutch Vice-Admiral's division at the beginning of the action. By degrees, however, they dropped into their proper place and engaged very warmly. Many logs notice that the Dutch Vice-Admiral's division was far to windward of its station, and that, being delayed by calms and light airs, it did not get into action till about 3.30 p.m.

From this time on little tactical movement was made on either side, and everyone found himself fully occupied with sheer hard fighting. The Allied centre gradually crept up until the two Commanders-in-Chief became engaged; and in the van Villette, by his own account,<sup>2</sup> never abandoned his project of weathering the English van. There was already a concentration of French ships on Leake's division when, toward 3 o'clock, Villette, working his way up the line, came abreast of the last of Leake's ships. Villette was tenth in the French order, while Leake had only six ships; but the six did not fight the ten all at once, for, seemingly about 1 o'clock, part of the French van division gave way and went to leeward.<sup>3</sup> The rear division of the French van began to give way about 3 or half-past;<sup>4</sup> and roughly an hour later Villette's flagship blew up abaft, and bore up out of the line on fire, with 100 killed and another 100 wounded. The remaining ships of the French van followed her, and the English van was left without opponents.<sup>5</sup>

It is desirable to fix as nearly as possible the time of this event, for a good deal depends on it. Naturally, however, the times in the

<sup>1</sup> Log of "Tartar," a frigate not in the line.

<sup>2</sup> "Memoirs," 350. <sup>3</sup> Diag. II., H. <sup>4</sup> Diag. II., K. <sup>5</sup> Diag. II., L.

logs vary wildly: some place it as early as 3.30, one as late as 6.30, most say 4 or 5. About 4.30 seems most probable, and this is confirmed by the French "Relation," which says "between 4 and 5."<sup>1</sup> The importance of this is that it postpones the incident to a time when the battle was already practically decided. Both fleets were already so thoroughly crippled that they could attempt no new movement. On the English side, in addition, powder and shot were already running short; some ships for want of them left the line before 3, and by 5 seven ships had gone, all in the centre. Of these, one was the "Eagle," Rooke's second ahead; the other six were consecutive numbers in the line, stationed between Rooke's flagship and Byng's.<sup>2</sup> To supply the loss all that Rooke had been able to do was to call into the line the two 50-guns ships from the frigate line. These two ships engaged about 4 o'clock, and continued in fight till the action ended in the centre about 7.

When Villette went to leeward, Shovell in the "Barfleur," and with him his second ahead, the "Namur," backed their topsails and went astern. How far Shovell went cannot be determined; the "Barfleur's" journal only says: "We backed our topsails to close the line towards our admiral, who was very warmly battered by the French admiral." The "Namur," however, went astern till she was able to engage the Vice-admiral of the White squadron, who was the twenty-first ship in the French line, while she was the tenth in that of the Allies. Shovell presumably backed still closer to Rooke. The remaining ships of the van lay still, two at least of them too crippled to move, and several others very much damaged. None of the van ships log that they ran out of shot, but the "Life of Leake" asserts<sup>3</sup> that many of them "for two hours before the engagement ended continued to fire with powder only to deceive the enemy."

The only tactical point of interest concerning the Dutch ships in the rear is that, at some time unspecified, but seemingly late in the action, four galleys appear to have made an attack, or at least a feint, against the sternmost of them.<sup>4</sup> No English ship logged any mention of this, nor is it noticed in any other printed account that I have seen. It can hardly, therefore, be accepted as established fact.

It is difficult to say exactly what happened in the rear about 7 o'clock. Most printed accounts say that the French rear gave way in the evening, but some of the logs say that the Allied rear continued firing even later than the centre. The explanation is perhaps that the French in that quarter drew off a little,<sup>5</sup> and that the Dutch, instead of following them, continued firing at long range till they could no longer see. The French vice-admiral of the White had gone to leeward (Diagram II., M.) a little earlier, so that at the end of the battle the

<sup>1</sup> *London Gazette*, between Nos. 4055 and 4056.

<sup>2</sup> See Diag. II.

<sup>3</sup> N.R.S., p. 167.

<sup>4</sup> De Jonge, III., 649.

<sup>5</sup> Diag. II., N.

only part of the French line left intact was that which is indicated in the diagram by a thickening of the line.

I have purposely refrained from speaking of the deeds of individual ships, partly because much is already on record in easily accessible books, but chiefly because to do so would tend to obscure rather than to elucidate the tactics of the battle.

Neither side wished to renew the battle, for neither was in a fit state to do so. The "Life of Leake" and the "Torrington Memoirs" are both quite honest about the state of opinion in the Allied fleet: when, after a day of westerly wind which had placed the enemy to windward, the wind again came easterly on the 15th, the Allies were compelled to steer for Gibraltar. To go into port was imperative, and they had no port inside the Mediterranean. Therefore, if the French opposed their passage, they must force a way through. The issue was so doubtful that a battle would not have been chosen, but there was no choice.

But the French did not oppose their passage; and none of their writers have hitherto admitted that the reason was that they, too, had had enough of fighting. What was advanced, apparently as the official reason, was that Toulouse must secure his galleys, which were in danger by being kept at sea. There was a considerable easterly swell, the fore-runner of a fresh breeze which got up on the 16th, so that it is impossible to say that this reason had no weight. But that which seems more probable is referred to by Tramond,<sup>1</sup> who says that, though Relingues implored Toulouse to attack, the courtiers with the Admiral, and even Victor d'Estrées himself, were opposed to a "son of France" exposing himself to an unnecessary risk. Toulouse was a natural son of Louis XIV.; D'Estrées, who was a Marshal of France, was his Chief of the Staff in much the same sense that Penn was to the Duke of York in 1665; De Relingues, who died of a wound received in the battle, commanded a ship as one of Toulouse's seconds, though he held the rank of lieutenant-general. The similarity with 1665 extends also to the interference of the courtiers.

#### A TACTICAL APPRECIATION.

It has been noticed that the French line at Velez Malaga was neither close-hauled nor straight. Its general direction was North and South, with the wind abeam; but the centre of the line was a little to leeward of the van and rear. Apparently, the van was ranged on a line running S.S.E., which would make the ships, while steering south, each bear 2 points on the quarter of her next ahead; but if the van hauled to the wind, it would find itself in line ahead. There is as yet not much evidence from which to deduce the posture of the French rear, but from what there is, it seems probable<sup>2</sup> that, like the van, it

<sup>1</sup> "Hist. Marit." 321.

<sup>2</sup> Log of "Lightning."

may have made an angle of 2 points with the centre. This has been accepted as being the case. (Diagram II.) Apparently, the purpose of such a line was to give both the van and rear an opportunity of weathering the end of the enemy line opposed to it.

The line with wind abeam was not new in 1704. It was used in two earlier battles—in 1673 by De Ruyter in the first battle of the Schooneveld<sup>1</sup>; and in 1690 by Tourville at Beachy Head.<sup>2</sup> In each of these cases, as in 1704, it was used by the fleet to leeward, as a defensive formation; and in no case was the fleet to leeward the English fleet. In other words the English had experience of this formation only from its use against them. On the first occasion the defending side was much weaker than the attacking, De Ruyter having about 55 ships to 75 Anglo-French; on the second the attack had 56 ships (Anglo-Dutch) and the defence 68; while on the third occasion the sides were equal.

The differences between these three defensive lines are probably significant. De Ruyter's line was straight, the other two were bent to leeward. It is possible that the curve in Tourville's line in 1690 was caused chiefly by the intention to use the van for weathering the head of the enemy's line, as was actually done. In 1704, at Malaga, this idea was apparently developed theoretically, but not in practice.

This is noticeable: that De Ruyter first used the line with the wind abeam as a purely defensive formation. Tourville, adopting it as generally the most suitable for the fleet which awaited attack, seems to have aimed at adding a power of offence. Seemingly, D'Estrées—for it would be idle to suppose that Toulouse had any constructive ideas on tactics—tried to give the fleet to leeward "a punch in both hands."

It will be remembered that the plan was not tried again: in the battles of all later wars the French reverted to the close-hauled line ahead as the best suited to the defensive position.

The question, therefore, arises as to how the idea originated that the wind abeam would give an advantage to the defence. The answer appears to be found in the volume already referred to as the Admiralty MS. That volume, in addition to the Fighting Instructions of 1673, contains a series of tactical drawings of some of the battles of the second and third Dutch Wars, to each of which the unknown author has added certain "observations." He shows, using the St. James's Fight of 1666<sup>3</sup> as his example, that the close-hauled line to leeward is dangerous as a defensive formation; for it allows an enemy coming down from to windward to "press the van" (or, as we might say, "to cross the T") and thus roll up the line from van to rear. This actually happened in the St. James's Fight, in which the fleets engaged were roughly equal, the Dutch to leeward being defeated. In Diagram V. their van is shown as giving way; their line ultimately was rolled up as far as A, but Tromp succeeded in keeping the rear squadron together.

The campaign of 1673 was the most critical which the Dutch ever fought, and it inspired De Ruyter with a genius equal to the occasion.

<sup>1</sup> Diag. III.

<sup>2</sup> Diag. IV.

<sup>3</sup> Diag. V.



His strategical accomplishment in that campaign has been held up as a model; it seems, too, that he should be credited with carrying the tactical art to a higher pitch than any of his predecessors or contemporaries. The force attacking him being stronger than his own nearly in the ratio of three to two, he extended his line to the same length as the enemy's, and, having the wind abeam, was able to luff with his centre to the relief first of his rear, then of his van.<sup>1</sup> In each case his wing squadron had given way and was followed by the enemy, who thus offered a gap between the attacking wing and its centre. In each case De Ruyter luffed up towards this gap, and by the threat of placing the attacking wing between two fires brought it back into line. The battle was, therefore, tactically drawn, which in the circumstances amounted to a strategical victory for the Dutch.

At Beachy Head the French to leeward were the stronger. They had no need, therefore, to use their centre as De Ruyter had used his. Instead, it was arranged that the van should stretch ahead on a wind and weather the allied van, as in fact was done. Villette says that the plan was his<sup>2</sup>; as he was Vice-Admiral of the leading division of the van, he also had the task of carrying it out. In Diagram IV., Villette's sub-squadron which weathered the Dutch is shown at A in its final position.

He says that he proposed it to Tourville and got his approval, and that Château-Renault, the admiral of the van, was so far from understanding it that he nearly spoilt it. It appears, however, from Château-Renault's account that this is mere captiousness on the part of Villette.<sup>3</sup> Tourville, being stronger in the centre than the Allies, was able to reinforce that part of his van squadron which remained to leeward after its leading division had passed round the head of the Allied van, and by tacking had placed the Dutch stationed there between two fires.

It is not remarkable that Villette, having personally experienced the success of this manœuvre, should have been anxious to repeat it at Malaga, where he commanded the whole van. It was clearly a manœuvre which might be very effective, especially when, as at Beachy Head, the van of the fleet to leeward was numerically superior and was able to extend its line beyond that of the attacking force. In that case it could, and did, wait till the enemy's van was engaged before hauling up with its free ships. The Dutch, moreover, played into the hands of the enemy by not extending their line to the head of the French line. At Malaga this condition was not reproduced: Villette could not establish an overlap, for Leake made sail with him. Villette, therefore, could not tack, and the movement failed. This failure, and perhaps also the fact that no other fleet action was fought for 40 years, suggests what is probably the reason for the abandonment of this formation. That it was suitable as a defensive measure, when employed as it was by De Ruyter, admits of no doubt. That, as modified by Tourville, it was

<sup>1</sup> Diag. III.

<sup>2</sup> "Memoirs," p. 98.

<sup>3</sup> Delarbre: "Tourville," 177.

suitable for use offensively when a numerical superiority was available, also seems clear. But that it was adapted for the use to which D'Estrées attempted to put it at Malaga, is far from certain. It may be suggested that D'Estrées tried to use the plan in an impossible manner; he needed an absolute victory, yet he adopted a plan designed for defence. He added refinements which were only likely to be effective in conditions which were not present; and it seems legitimate to say that, when Villette's movement failed, all hope of a decisive French victory was gone.

There was no possibility of attempting a similar movement against the rear; for the Dutch rear division, which was late in getting into action, was by that very fact so placed to windward that it made it impossible for the French rear division to get to windward (Diagram II., G).

It remains to try to explain how it was that Rooke failed to secure a tactical victory. We have seen that, after much hard fighting, the French van was wholly beaten out of the line. The question has often been raised why the English van did not follow them. Leake asked Shovell for leave to go to leeward after them, and Shovell refused. On the supposition that this took place early in the day, it has been assumed that Shovell stood on the letter of the Fighting Instruction, introduced in 1665, which laid down that "none shall pursue any small number of ships of the enemy before the main body of the enemy's fleet shall be disabled or shall run." But the question was whether the whole French van should be followed. They were much disabled, but in their position to leeward they had the help of galleys which could put their heads the right way for engaging, and could also, if the wind admitted it, tow fireships into position to attack the pursuers.

The arguments on the other side were strong. The English van had suffered so heavily that one of the ships logged that they did not pursue because they were not fit to do so;<sup>1</sup> above all, Rooke in the centre needed help. They had little ammunition; and it was late in the day. In the circumstances, it does not seem fair to assume that the Fighting Instruction influenced Shovell unduly. The most, perhaps, that should be said in criticism is that, when he and the "Namur" backed astern to continue the battle against the centre, he might perhaps have taken a few more ships with him. Two or three seem to have been fit for such service; the rest were glad to lie by to refit.

The pressure then passed to the leading division of the French centre, which in turn gave way a little later.<sup>2</sup> For similar reasons it was not followed.

But no serious impression could be made on the French centre. Throughout the day the fighting was heaviest there, but neither side had any marked advantage. It was a deadlock which lasted until dark. What had happened was that four French divisions, from van to centre, had given way roughly in succession. But this was not rolling

<sup>1</sup> Log of "Norfolk."

<sup>2</sup> Diag. II., M.



up the line in the sense that the attack on the van rolled up a close-hauled line. Here the disabled ships went to leeward without interfering with those astern of them in the line. In the close-hauled line under way the element of confusion was introduced: the van being crumpled up, the ships which followed it could not hold their course without being entangled and bunched. It seems obvious that, in view of his frontal attack, Rooke could not foresee the order in which the French divisions would give way; and it is impossible to ascribe to him an intention of rolling up the French line from the van.

It is curious to notice that, though Hoste's book "*L'Art des Armées Navales*" appeared in 1697, and though he alleges that he obtained his doctrine from Tourville, yet he greatly prefers the line close-hauled to the line with the wind abeam; and also that he prefers doubling on the rear to doubling on the van. It is difficult to reconcile Beachy Head with his rules, and still more difficult in the case of Malaga.

The detailed study of this battle will serve to show that tactics has its underlying principles, and that these are eternal. Several such principles might be deduced, but for the present I will mention only the most obvious: Concentration.

I had hoped also to refer to the limitations imposed on the Commander-in-Chief by the conditions in which he worked; but the subject is too large and too important to be introduced at the end of a lecture.

#### CONCENTRATION.

At every stage in the history of tactics we can trace an aspiration to concentrate on the enemy. At different times different methods have been tried. In the Tudor and early Stuart period, when the rate of fire was extremely slow, the object sought was to bring a group of ships against one individual ship and to concentrate on her by defiling. The introduction of the line of battle during the Dutch Wars put this method out of court, and a new one was introduced. If, being to leeward, you could with a part of your fleet tack through the enemy's close-hauled line, you thereby placed the part cut off between two fires. But in the course of the Dutch Wars this method, too, went out of favour. It was open to the objection that, doubling in this way, you were liable to hit your own ships with the shot that went over the enemy; and to the more serious objection that a parry to it was devised: "In case the enemy tack with equal numbers with you, then is your fleet divided and not the enemy's."<sup>1</sup> This method, therefore, fell into disuse during the third Dutch War. No new one was found to replace it, for the method favoured by Villette was not essentially different from old usage. In these conditions men fell back on the consideration of how best to strengthen the line, and the line evolved by the French at Malaga affords a good, if extreme, example of the

<sup>1</sup> N.R.S., "*Fighting Instr.*," p. 153, n. The case seems to be overstated: probably by "and not" the writer meant "not less than."

method employed. Such a line, by massing heavy ships in groups, gave a local concentration of force at several points in the line. If the weak spaces between the strong groups were small, as they were in the French line at Malaga, it was not likely that a breach could be made in the line which would permit of an enemy throwing the whole into confusion. Such breaches might be made, and were made at Malaga; but the effort of making them was so great as to render the assailant powerless to follow up the advantage. The tactical value of the very strong group was, therefore, undoubted. It was the salvation of the French fleet at Malaga that the group with the Commander-in-Chief was strong enough to defy all efforts, and to serve as a rallying point from which to maintain the formation of the fleet.

The idea of concentration did not advance beyond this point until long after the period considered in this paper. As a natural revulsion against the undoubted risks of the dynamic form of concentration practised in the Dutch Wars, a method which greatly increased the difficulty of maintaining the cohesion of the attacking fleet, men had come to see considerable advantage in a static method. But this is not to say that the rigid maintenance of the line had yet been made a fetish. The line was still a means to an end; not, as it seemed to Byng, an end in itself.

#### DISCUSSION.

THE CHAIRMAN: Ladies and Gentlemen, I have to catch a train in a few minutes, and I hope, therefore, you will allow me to make the remarks I wish to make now, instead of summing up at the end of the discussion.

There are a great many points in this battle which it is rather difficult to follow at first glance, but there are a good many points that strike me as being of quite definite value for our study at the present moment. We are gradually evolving certain principles of tactics, and a lot of them can be seen in this particular battle.

Mr. Laughton has disagreed with the view that Velez Malaga is a battle possessing no military interest. I agree with him. I think he has shown that it possesses much. Illustrations of fundamental tactical principles, principles applicable to all times, are to be found in it. To me it appears to furnish an example of the use to which a study of the old battles can be put. Time will not allow me to refer to all the points that occur to me; but I will mention what I can.

First, then, it furnishes an example of "the object," and the effect of the object both on strategy and tactics. As Mr. Laughton has shown, the object was to secure our recent important capture—Gibraltar. Two ways of doing so were suggested to Rooke by Wishart and George Byng—defensive and offensive. The defensive method was to fall back and protect Gibraltar directly, by anchoring the fleet there. Not only, however, did that not promise to furnish the needed defence, but it offered no promise of any permanent security. The danger to Gibraltar was the enemy fleet, without which the siege works could do nothing. If that fleet could be put out of action either permanently or temporarily, Gibraltar would be secure. I am reminded of what Nelson said about engaging Villeneuve on his way back from the West Indies—that he would fight him not-

withstanding his superiority and the prospect of a drubbing, with the object of preventing the French from doing us any harm that year. So, if Toulouse could be sufficiently injured to be no threat to Gibraltar that year—until the spring fleet was fitted out or reinforcements for the garrison arrived from home—Rooke would have done what strategy demanded. The more complete the success, the better; but anything approaching "destruction" in the material sense he could not expect.

I think Rooke's decision, easy as it looks to us to-day, is deserving of praise. We see his First Captain, Wishart, urging him to fall back on Gibraltar; and that there would be a temptation to do so must be realised. It is the kind of situation in which, failing personal experience, one is glad of some support from principle or previous experience—history. There is, perhaps, some slight resemblance to the temptation Sir John French resisted to take his tired troops into the shelter of Maubeuge, but was fortified against it by the recollection of Bazaine.

Then, again, there was his weakness—approximate numerical equality, but shortage of men and ammunition, foul bottoms, a smaller flotilla. If Rooke were beaten in the open he lost Gibraltar, just as if he beat the enemy he kept it. Some might urge: risk nothing—hold off—refuse action—retire. Byng's son, in a not unlike situation off Mahon, did succumb to this form of temptation. You recollect his question to the Council of War, "whether Gibraltar would not be in danger by any accident that might befall this fleet?" and made the answer, "It would lead up to the decision not to renew his fight with De la Galissonnière."

Rooke, however, decided to fight. His tactics were of the cautious kind, favoured by the school of his day. Though he attacked, his attack was in the inflexible line. Success depended upon sheer hard fighting, as Mr. Laughton has said. There were no tactical movements like those of the great Commonwealth, Jacobean, or Dutch commanders: but the reason why there were not is not beneath our notice. Mr. Laughton properly reminds us of what is often forgotten, that an aspiration to concentrate on the enemy is to be traced at all stages of the history of tactics: but the difficulty of bringing about a concentration that would not expose one to a turning of the tables proved too great at that earlier time. He who doubled on a skilful enemy might be doubled on himself. So it was with chasing, and the doctrine of following up a beaten part of the enemy. The danger of pushing too far, as had happened at the St. James's fight and had led to—or was said to have led to—the burning of the "Resolution," was an argument for not pursuing at all. "In case of a defeat," says an annotator in 1673, "it is not pursuing the first disabled, but to press the rest in condition." Hence one deterrent to Leake's pursuit of the van; but I am not sure whether Shovel had not power to permit Leake to chase. I think he had.

Mr. Laughton has pointed out that it was not the only deterrent. There was also *Time*, an element that has played in all sea battles an insufficiently appreciated part: *Time* was an influence in this battle, as we have seen. Tactics which require much time for their fruition are liable to fail to bring about their intentions. This battle furnishes more than one example of the prodigious importance of *Time*. Nelson knew it well.

The disposition of the Flotilla is interesting; the French apparently massed at the ends. The object of this, as interpreted by Rooke, was to attack with a part of their fireships whichever way the Fleet was standing. The massing was, however, not very formidable—five at one end, three at the other, out of the small total of nine. The galleys may have been intended to tow and support the fireships; for the failure of their fireships at Schooneveld, attacking without order

or support, had been appreciated. Rooke, as we see, appointed frigates to guard himself against such an attack as the French dispositions foreshadowed.

The English fireships were even more divided than the French, and such few as there were were in the centre. But there seems to have been no real combination between them and the rest of the line. Whether the intention was to degrade them to the defensive duty of guarding the battle fleet against the enemy's fireships, as Tourville did at Beachy Head, is not clear. Perhaps Mr. Laughton and the French historians, M. Tramond and M. de la Roncière, will be able to clear up this point. That we employed bomb vessels in the battle seems indisputable, on the evidence of the French. It is greatly to our credit that we did so. I do not know another instance in which they were used.

All these questions have their counterparts to-day—methods of attack, of maintaining cohesion, of *liaison* of the several types and weapons, of pursuit, of time; and the scientific examination of such battles as Malaga is intellectually stimulating. Mr. Laughton has not wasted his time in making a deeper study of the battle than we have hitherto had, nor have we—at least, I speak for myself, and I hope for every one here—wasted ours in listening to him.

Ladies and Gentlemen, I have had my eye on the clock the whole time, because I have to catch a train at Liverpool Street, and with your permission I will now go.

The Chair was then vacated by Rear-Admiral Richmond.

THE SECRETARY (SIR ARTHUR LEETHAM, C.M.G.): Would any lady or gentleman like to make any remarks, or to ask any questions?

If not, it only remains for me to ask you to pass a very hearty vote of thanks to Mr. Carr Laughton for his most able lecture. I am sure that we have all learnt a great deal from it. Personally, I was quite ignorant of the battle and of its importance until I heard the lecture to-day. The remarks which were made by the Chairman will, I am sure you will agree, form a very valuable addition to the lecture when it is published in the JOURNAL. I now ask you to pass a very cordial vote of thanks to Mr. Carr Laughton for his interesting lecture.

The resolution of thanks was carried with acclamation.

MR. CARR LAUGHTON: Ladies and Gentlemen, I can only say, thank you very much. I hoped to persuade Admiral Richmond to say something on the question of the devolution of authority, which seems to be one of the fundamental principles that is operative in tactics as in other pursuits; but unfortunately the fact that Admiral Richmond had to catch a train at Liverpool Street prevented him from doing so.

The meeting then terminated.



## DIAGRAM I.

In this the lines of battle are shown  $\frac{1}{4}$  mile apart, *i.e.*, at long range. The fireships, &c. on each side are shown  $\frac{1}{2}$  mile, and the frigates 1 mile, from their own line of battle.

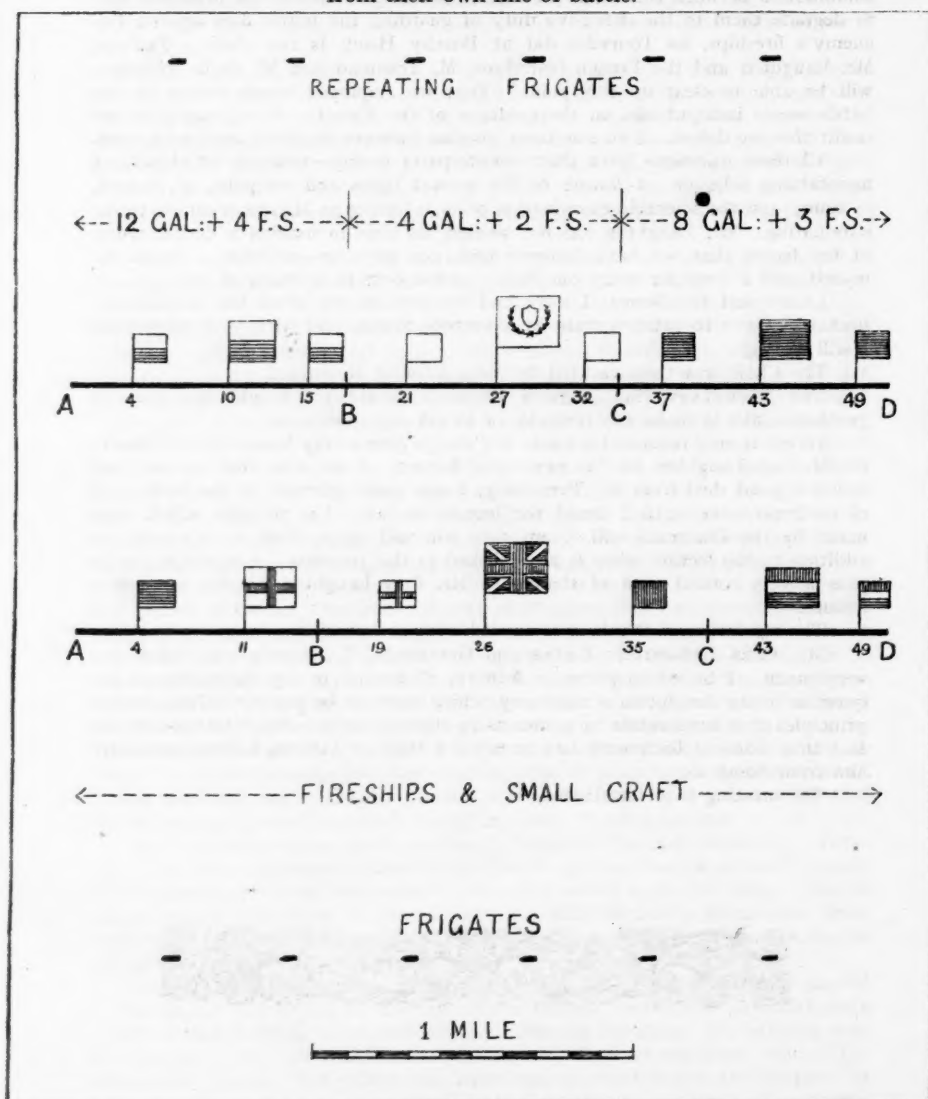




DIAGRAM II.

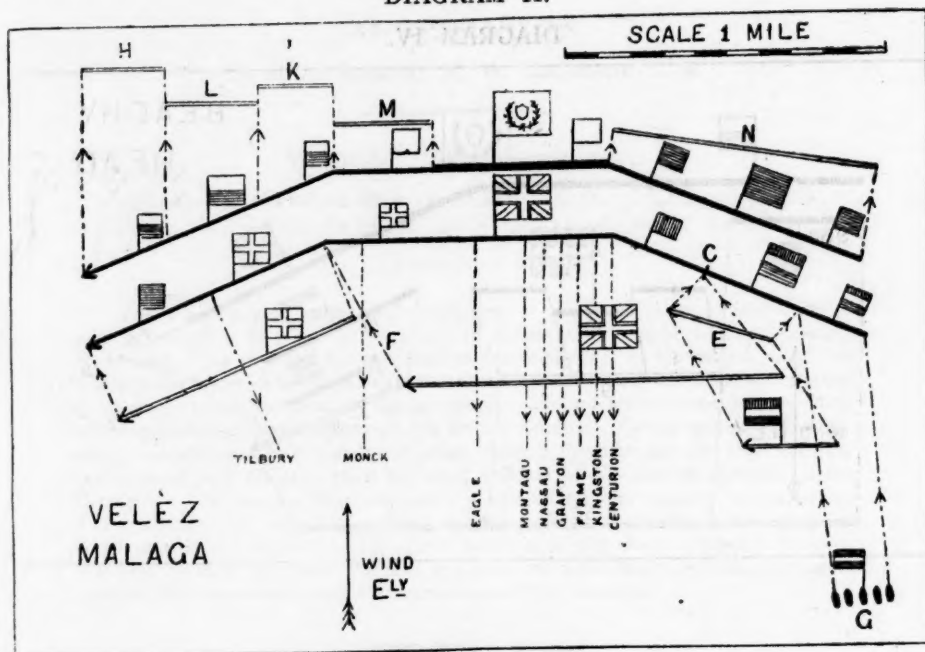
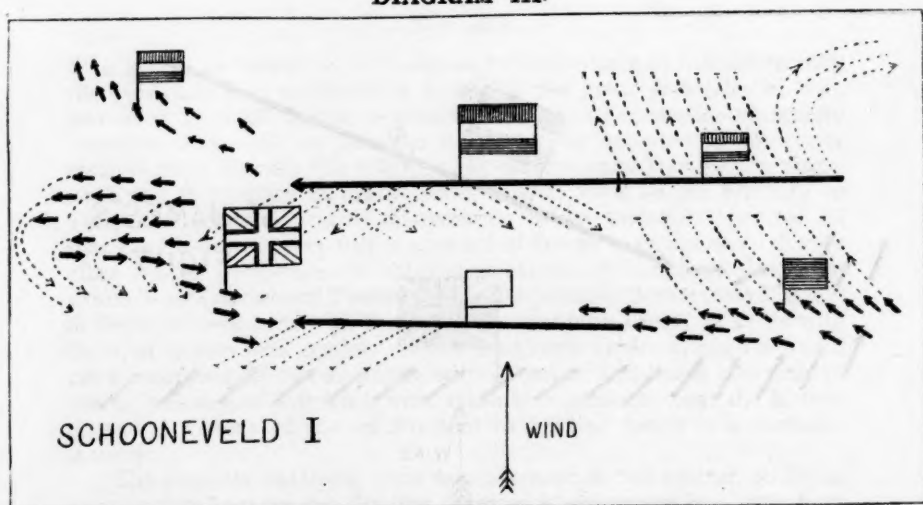


DIAGRAM III.



**DIAGRAM IV.**

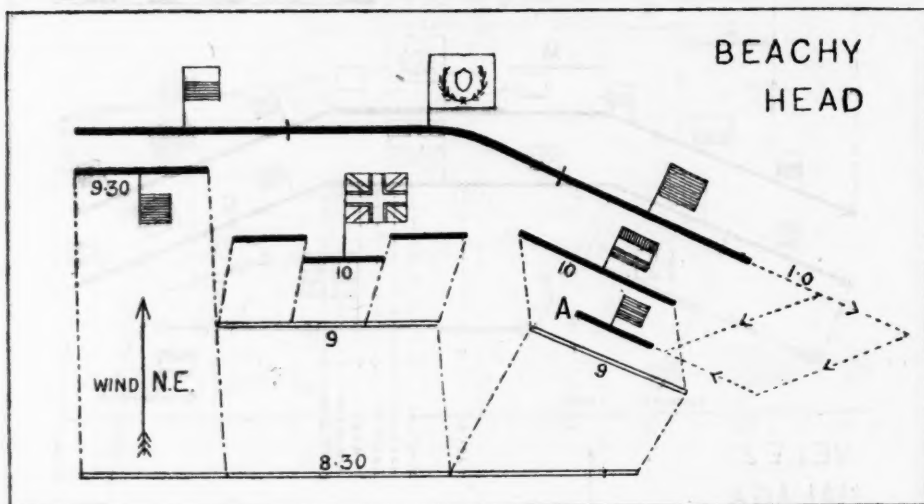
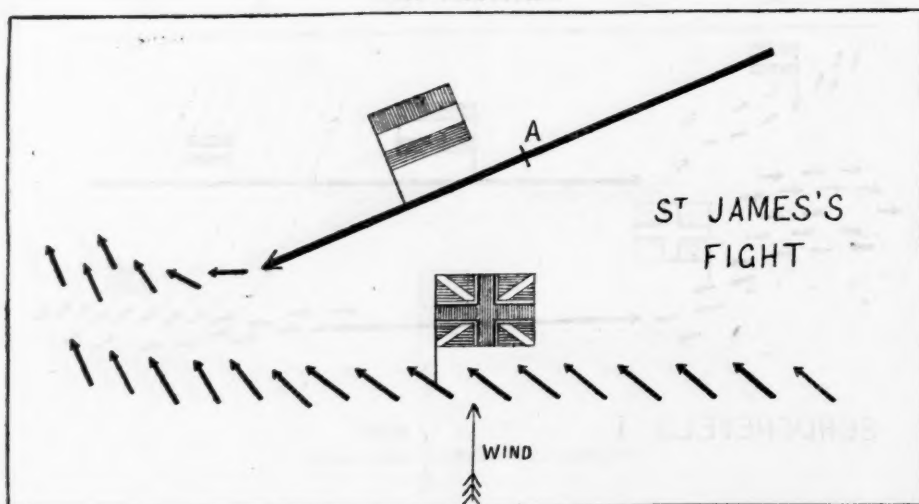


DIAGRAM V.





## CO-OPERATION.

By REAR-ADMIRAL H. W. RICHMOND, C.B.

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Wednesday, 28th February, 1923.

GENERAL SIR CHARLES MONRO, BART., G.C.B., G.C.S.I., G.C.M.G.,  
A.D.C. to H.M. the King, in the Chair.

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THE CHAIRMAN: Ladies and gentlemen, it is my pleasure to introduce to you (although it is really unnecessary to do so) our lecturer to-day—Admiral Richmond. We all know the positions he has occupied; we all know how he has discharged his duties in connection with those positions, and we all know his great competence to place before us the problems connected with co-operation—which are so essential to the interests of the British Empire. To the ordinary student, even, it is apparent how very much more difficult these are for our Staff Officers, both Naval and Military, than for Staff Officers of Continental Armies. Take Germany. The General Staff elaborate a scheme for one frontier or the other, and it changes but very little. With us, the problem is constantly changing by developments of every sort and kind. It behoves us, therefore, to listen to lectures delivered by men who know the pros and cons, the advantages and disadvantages, and the difficulties associated with questions of this character.

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### LECTURE.

IT is hardly necessary for me to repeat, to an audience at this Institution, the platitude that co-operation is one of the great principles of war, just as it is of all human activities. But it is permissible to remind ourselves that while no principle is more freely accepted in theory, or receives more liberally the tribute of lip-service, none is more constantly neglected in practice in every phase of war, from Grand Strategy to Tactics. Every one knows co-operation to be essential; yet for all that the history of every war is a record of failure to co-operate. Either allies fail to co-operate—is not the weakness of coalitions almost an axiom?—or Continental Powers fail to co-operate with maritime Powers; or fleets to co-operate with armies; or armies with fleets; or fleets with fleets, or armies with armies. It is indeed remarkable—though it would not be surprising if human nature with its innate selfishness, shortness of vision, and mental indolence were taken into account—that the history of war is a story of the employment of fighting forces in a sectional manner.

The need for obtaining some improvement in this matter, so far as co-operation between the fighting Services is concerned, has lately been

very prominent, and several cures, or prophylactics, have been suggested, among which the more prominent are a Ministry of Defence, a Minister of Defence, and a Combined Staff. These have been very fully discussed and I do not propose to make any study of them to-day. What I wish to do is to make some examination of the scope of the problem. I do not think that mere assertions that there has been a lack of co-operation between the Navy and Army in considering the policy of the employment of arms, or that failures in the field have often resulted from lack of co-operation between the Admiral and General, are sufficiently definite; nor even that they are comprehensive and accurate. In fact, I am inclined to think that the most commonly quoted case, that of lack of co-operation of commanders in the field, is, in actual practice, one that has less often occurred, and has been of far less consequence in its results, than any of the others. But as it is generally easier and more popular to attribute failure to the officers than to other causes, so a facile means of accounting for failures is always at hand, and is readily accepted.

What, then, is the problem of co-operation? It is a problem in many stages. In the first, there is the fundamental question of the national system of defence, upon which depends the proportion of expenditure upon each of the Services. We are called upon, and properly, to co-operate in allocating expenditure to the various Services; and one of the proposed measures for doing this in the best way is the establishment of a Ministry, or Minister, of Defence who would examine the estimates of each Service and give the "proper" proportion to each. But the immediate question that presents itself is—upon what is his decision to be based? How is he to say what is the proper proportion? For there are no fewer than three separate theories as to the functions of the Services and the manner in which a decision is to be reached in war. According to one of these, which has been promulgated recently, the function of the Navy is to carry the Army wherever it wishes to go. A second, echoing to some extent a phrase of Colonel G. F. R. Henderson in his "Science of War," defines the function of the Army as being to assist the Navy to obtain command of the sea. The former of these proceeds upon the assumption that the principal fighting Service of the country, that by which wars are won, is the Army. The second assumes that war, so far as we are concerned, will be won by the Navy. And a third theory has recently flown—literally—into the arena, which assumes that war will be won by an air force, attacking the civil populations in what is called a "War of Areas," and that consequently the functions of Army and Navy either disappear or become ancillary to the new arm. And in the middle of all this run contradictions—certain practices are forbidden in one set of operations which form the whole basis of the other. For example, "frightfulness," expressly repudiated recently in the case of sea warfare, appears to be a fundamental principle in the air.

I state these theories—I have heard all of them warmly maintained—

not for the purpose of discussing them, for that is not the subject of my paper, but to bring out a fact affecting co-operation. If there is no common policy, no accepted doctrine of the functions of the Services or of the way this nation should make war, how is it practicable for co-operation to exist? If you put a cart down in an open field with several gates, and tell several men to co-operate in dragging it out of the field, you will not get much motion on the cart until you have pointed out through which gate it is to be taken. If then, co-operation is required, is not the first step towards obtaining it to be sought for in a clear definition of policy? This in turn depends upon a clear understanding of national interests.

If the great national interest be defined, the policy proper for its attainment will be suggested. "Exclusiveness of purpose," says Napoleon, "is the secret of great successes and of great operations." So, just as in all affairs of life one concentrates one's efforts upon attaining one's principal object, and subordinates lesser things to that attainment, the minor interests of the country should be, as they have been in earlier times, subordinated to the principal interest. National policy in all its manifestations receives its impulse from that main interest; and the "Services" that are developed—that is, the servants of policy—are adjusted in the way that best will lead to its attainment. I think no one can study the History of Foreign Policy without receiving the impression that our statesmen, at least those of our great periods, had always a clear-cut definite view of the national interest definable within the compass of a few words: and that this afforded the guidance as to whether we should develop maritime or land power, and the amount of each.

Therefore, as a first step towards co-operation, let us be sure of the purpose. We are then able to think what form of weapon—army, navy or air force—is best adapted to attain it, and the degree to which the assistance of the other Services is essential. What I am trying thus to express is possibly more easily illustrated by an example. Louis XIV. had to consider whether the interest of France lay in controlling the affairs of the Empire, increasing France's dominion in Europe, and supporting the Counter-Reformation; or in trade, colonies, and religious freedom. Louvois urged the former; Colbert the latter. For the one, armies were principally needed; for the other, sea-power. No nation can possess a superiority in both over rival land and sea Powers. Rightly or wrongly he chose the former, and built a fleet, powerful indeed, but secondary in importance to the armies. If Louis had made his choice differently and decided that the interests of France did not lie in domination in Europe, in breaking up the Empire, but in trade and colonies, he would have avoided aggression on the continent and developed ships, navigation and sea-power.

The actual results of the policy followed by Louis and his successor and the possible results of the opposite policy emphasise the prodigiously far-reaching effects of policy. France gained great military glory, but

was reduced to poverty and distress, from which she never fully recovered; and she lost her colonial empire. The opposite policy might have brought her wealth, prosperity and an empire oversea. Both Canada and India might now be hers. The French Revolution might never have occurred.

The person, then, who has the duty of adjusting the "proper" proportion of expenditure upon each Service must assuredly know what the policy of the country is. Is it regeneration of the co-called backward races? Is it protection of the down-trodden? Is it expansion of territory? Or is it security of employment for this people and their trade? Let this be made clear and co-operation between the three Services becomes easier. Until it is done we cannot see the wood for trees. It is useless to complain that the fighting Services do not co-operate if no clear outstanding object is given them. In the past there is no question but that the national object was clear—the maintenance of maritime superiority. Both the external and internal policy were used to contribute to this, and the armaments of the kingdom were based upon the hypothesis that this being the foundation of our security and prosperity, its attainment must be our principal aim. We need a similar clear understanding to-day. I do not think it is possible to say that we possess it.

Next, there is the business of co-operation between allies. Although it is obvious that allies must have something in common to achieve—otherwise they would not have allied themselves together—yet the difficulty of getting them to work together is one of the commonplaces of the history of war. One is inclined, in reading history, to be impatient at the apparent perversity that makes the several parties to coalitions pull in different directions, both on land and sea. Yet it is not really perversity: It is that factor of self-defence that is elemental in human, and indeed in all, nature. It is evidently extraordinarily difficult for bodies of men to realise, until disaster stares them in the face, that their interest is a common one—the old word for it was the "Common Cause." The tendency to separate what are believed to be "national" interests from "common" interests appears irresistible. Putting aside minor motives of personal jealousies, of lukewarmness, of doubt as to whether advantage lies in supporting one side or the other, we have persistently recurrent examples of deliberate sectional action on the part of nominal allies. We see the Portuguese, when we have gone to Lisbon with a fleet, in Leake's time, putting every difficulty in the way of its maintenance. The Dutch, when furnishing a squadron to our fleet in 1744 in accordance with treaty stipulations, keeping its control in their own hands, short-provisioning it, and desiring to employ it for the defence of the coast of Holland. We see the Austrians and Sardinians in 1718, allied to eject the Spaniards from Sardinia and Sicily, but disagreeing so acutely between themselves as to whether Sardinian or Austrian territory should first be reconquered, that for nine months nothing at all was done for either; nor would anything have been done at all but for the intervention and representations of the British Admiral in the

Mediterranean, who pointed out that even a bad plan was better than none. Marlborough's difficulties with the Dutch deputies, the failures of the several Coalitions between 1793 and 1814, the total failures of the French and Spanish fleets to work together in the three great wars of the 18th century are all familiar. And yet, with all of these examples behind us, their effects perfectly well known to us, can we honestly say we reached a stage of perfect co-operation in the late war? And, if not, why not? Apart from different conceptions of strategy, is this not primarily due to a mistaken idea that some national interest outweighs in importance the common interest—that the exclusion of the ally from some territory, the conquest of some particular and desired provinces, or the maintenance of some branch of national trade, is so essential a matter that nothing must prejudice them? Examples of all these will occur to you in the late war. Yet, in the long run, what is this except the old delusion that there is something more important than beating the enemy, and neglect of *Æsop's* fable of the bundle of sticks? I have seen instructions in which a British Admiral, ordered to co-operate with a naval force of another nation, was specifically told that he must not do anything that was averse from his country's interests. The French Minister of Marine in 1915 approved the idea that France should husband her fleet. The British and German fleets would probably fight, and even the victor would suffer heavy losses. It was, therefore, to "the interest of France" to keep an intact fleet, which could then step into the breach; and she would be able to appear at the peace-table in a relatively strong position. The interest of the country, not the interest of the common cause, dominates this idea, just as it enters into the British instructions quoted earlier. The same idea is to be found in the Italian expression "*sacro egoismo*," and "*la nostra guerra*." None of these ideas are informed with the true spirit of co-operation. They are, I suggest, precise examples of what to avoid. They contain what lies at the bottom of all the failures to co-operate—the belief that the common cause is subordinate to the nation's interests. It was in such beliefs that the Spaniards, thinking of their nation's interests, sent their fleet to recover Gibraltar, instead of combining it with the French to destroy the British fleet—after which they could have had Gibraltar for the asking. The Austrians were thinking of their nation's interests in sending an army to capture Naples in 1742, instead of combining with the Piedmontese to destroy the Franco-Spanish armies. The Dutch were thinking of their own interests when they opposed Marlborough's designs. The only real interest in each and every case was the destruction of the enemy, and to achieve this they needed to devote their efforts exclusively to the beating of the enemy—in complete co-operation.

But if this be so obvious it is none the less obvious that the difficulties of getting allies to act in accordance with a sound principle are permanent. We have noble examples of an opposite interpretation, none, I suppose, more so than Russia's advance into East Prussia in the early days of the war. But the examples of the opposite state of thought so far outnumber



these that the practical question—and that is the only one that matters—is, can this be minimised in the future? And how? Did not we learn a great deal about how to avoid sectional action in the course of the late war? Blockade measures, for instance, were not really co-ordinated until 1917, when we did at last discover methods of co-ordination. But it was not until three years after the outbreak of war that the Allied Blockade Committee was formed, which, with its branches in various ports, contributed so largely to bringing about the strict limitation of supplies to the enemy. An examination of our experience in this matter might indicate certain broad lines upon which to develop administrative machinery which can be set in motion sooner than three years after the outbreak of war. Should we, indeed, not aim at an effective employment of our instrument in co-operation with those of whoever may be our allies early in the war, rather than towards its end? In fact, we should be able to begin the next war with measures based on the experience of the last, instead of having painfully to relearn it all.

Administrative machinery is not, however, the only thing. A correct mentality is equally, or even more, essential. We must have not only a recognition of the necessity for co-operation, which most of us possess already in a platonic form, but also a realisation of the difficulty of attaining a full-co-operation, which realisation will spur us to make the greatest possible efforts. While the former is common, the latter is not. It is not difficult to take steps, in their military training, that our officers of all three Services should have their eyes opened to it; but it is not they only who have the ordering of things. The high direction of affairs in war is, and must be, in the hands of statesmen. Is it too much to hope that provision should be made whereby some of those who will have the direction of affairs in their hands shall have had an opportunity of knowing how influential a part this international co-operation has always played in war? The military lectureships at Universities furnish an opportunity for doing this, for emphasising the influence of exclusiveness of purpose in war. But in so far as the fighting Services are concerned we do know how we produced a certain measure of co-operation towards the end of the late war. We found, for example, that an organisation for centralising the discussion of strategy was necessary. We found measures for regulating command of allied forces necessary, both on land and at sea—and difficult it was. In fact, we rediscovered the truth of Raleigh's saying that "The plurality of commanders in equal authority is for the most part occasion of slow proceeding in the war," and produced some means overcoming the difficulties. The measures for setting on foot again, at the earliest period of a war, those methods of controlling strategy and vesting command, which were found practicable and sound, so as to avoid the "plurality of commanders in equal authority"—strategical or tactical—can be studied, kept on record, and made ready for proposing for adoption.

Passing from the co-operation of allies to that of armies and navies, I come down more closely to the soldier, sailor and airman. This



co-operation extends from preparation and provision of instruments—navy, army and air—in their “proper” proportions, to planning their use, to devising strategical and tactical combinations.

For the purpose of preparation, provision and planning, we need, as I said earlier, first of all an accepted definition of policy, of which war is the course of action by which the objects of policy are attained. But next to that is an accepted agreement as to what we mean by “war.” One hears “war” and “naval war” spoken of; and, I suppose “aerial war” as well. Personally, I dislike the expression “naval war.” I like to think of war as one, not as “naval” war as though it were something distinct, some private bit of fighting at sea. There are the *operations* of war on land and the *operations* of war at sea, the whole making up “war.” I am glad to notice that the title of the Naval Official History is “Naval Operations” and not the “Naval War.” What I would ask is, have we, as a whole, a clear picture as to how this country has made War throughout its modern history—that is since it became a modern trading state under Cromwell? Military histories or naval histories are only too often—there are admirable exceptions—records of military or naval operations, dissociated from one another, written round only one part of the whole. What we need to be clear about is the means whereby we, this nation, set about employing those assets of strength we possess to force the enemy to desist from the policy he was adopting. We are inclined to study the military campaigns, and the naval campaigns, but not the manner of making War—that is, utilising the forces naval, military, geographical, financial and commercial to “compel the enemy to compliance.” What form did our national effort against Napoleon take from 1806 to 1812? We know there was a war in the Peninsula, various expeditions in different parts of the world, a fleet in the Bay of Biscay and another in the Mediterranean, squadrons in the Baltic. But do we look at the thing as a whole, ascertain what was the principal object of all these several operations, connect up the Milan and Berlin Decrees and the Orders in Council, with the invasion of Russia, the War in Spain, or the War with the United States in 1812? Some of us probably do this, but I am bound to say I was never taught to do so. The relation between them was hardly noticed. All these events were treated in watertight compartments. Unless the study of the wars of the past is made as a whole I venture to say we are not training ourselves to make real preparation for war, however much we may be preparing ourselves to conduct the operations of war.

If we cast our eyes backwards to the period preceding the late war, can we trace there any signs that the impending war was studied as a whole? There were naval plans for the disposition of the main fleet, the distribution of cruisers on foreign stations, the distribution of coastal flotillas; and military plans for the movements of the expeditionary force. There were plans for the defence of ports, of territories and so forth. But no sooner did war break out than expeditions that clearly formed no part of the war plan were set in motion. Trooping arrange-

ments for bringing back armies from India had to be begun, together with many other things which most of us recollect. The Dominions are telegraphed on 6th September to undertake important Imperial services against German colonial possessions whose importance had not apparently attracted much attention before 4th August. Tsing Tau was later on taken. No one will be so foolish as to imagine that absolute cut and dried plans can be prepared in every detail; but an examination in common of the problem of war and of the manner in which we believe our whole forces should act, will reduce the need for extensive improvisation such as we have seen. And it is essential that the Dominions should play their part in that common examination.

No one, again, who has examined the problems of shipping and supply can say that we should not have been saved much trouble if both Services—I except neither—had known more of the economic needs of the country. The effects of recruitment of men for the Army upon the coal industries will be in every one's recollection; but it was also intimately bound up with the submarine campaign. When shipping became scarce, its efficient employment became one of the most pressing needs of the country. The turn rounds of shipping were affected by shortage of dock labour; if ships could not sail quickly and constantly, supplies could not come in. Delays in turn-round caused by want of skilled labour were a direct aggravation of the submarine difficulty. I am very far from pretending it was easy, I might even say possible, to foresee this before the war. But I would say that had all of us, seamen and soldiers, made a closer study of War in its broad economic aspects we should have realised the quicker, as they grew, the impending situations, and have avoided some of the mistakes that the most Pangloss-like of us cannot pretend that we did not commit.

Such a study could only be made in co-operation. Some organisation for such study must exist if we are to avoid a repetition when next trouble arises. The Staff Colleges are three separate institutions—one at Camberley, one at Andover, one at Greenwich. Can these, even if they had the time, undertake this study? I doubt it. We have institutions for research in the domain of physical science as applied to war. It is not too much to say that the conduct of war is a matter equally needing research in the scientific spirit. When that is done, co-operation will become a real thing.

Turning from co-operation in the plane of major strategy to tactical co-operation in the field, I think we want to make more of a reality in impressing it in our training. It is one thing to state as a solemn platitude that the "gentleman must haul and draw with the mariner." It is quite another to impress it, to drive it home by means of illustration until it becomes a part of one's nature, of one's bones and blood, so that to act becomes a habit, an instinct. But while teaching can do much it cannot do all. It is not enough. Combined practical work is also needed, and as much of it as possible.

There are records of failure in command, but also, one is thankful to

say, plenty of admirable examples of the fullest co-operation between the naval and military commands. I think we need to extract these, as well as their converse, from the pages of the past (in which I include, of course, the late war), and rub them into the minds of the rising generation, putting the pictures before them while they are young and their minds receptive, retentive, capable of assimilation; showing not only the spirit but also the actual measures taken to assure that each Service pulled 100 per cent. of its weight. There is one example of which I am so particularly fond that I should like to repeat it. When Nelson was on the Riviera in 1796, Beaulieu, the Austrian General, sent an officer down to Voltri to ascertain the object of the British squadron. Nelson replied that "co-operation was my duty . . . I begged he would assure the General that my squadron had no object whatever but the co-operation with his army . . . I was authorised by Sir John Jervis to promise the most sincere and cordial co-operation, for that nothing should be omitted on his part to convince the General and our allies, as well as our enemies and the neutral Powers" (observe the statesmanlike note in that sentence), "how much the Admiral had the good of the Common Cause at heart. He asked me two or three times if there were not a risk that my squadron might be lost on the coast. To this I constantly replied that should these ships be lost, my Admiral would find others, and that he should risk the squadron at all times to assist the General." I think a better exposition of the doctrine of co-operation than was given by Jervis and Nelson—for Jervis clearly approved this—it would be impossible to find. I suggest that Jervis's previous experiences contributed to his breadth of view—he had been with the expedition under Wolfe to Quebec, and had conducted that admirable series of operations—true models of co-operation—with Sir Charles Grey in the West Indies. If one needs examples of the doctrine of co-operation one can always find them in Nelson's despatches. I know of no better source to which to go for practical illustration of the doctrines of war in all its forms.

I have heard it said that so long as there are good and friendly personal relations between the commanders, all will go well. I agree that they are indispensable, and that they will lubricate the proceedings and eliminate much friction. But they are not enough. In that very campaign of 1796 there were the best of all possible relations between the commanders of the Austrians and Sardinians, Beaulieu and Colli. Personal friends of long standing, meeting constantly to talk things over, repeating to each other that nothing should ever be done to interrupt the harmony of their relations, they wholly failed to co-operate. Bouvier, in his "*Bonaparte en Italie*" says: "Discord was permanently rife . . . the doctrine of each for himself prevailed." It is the *doctrine* that matters. Each commander, military or naval, needs to be soaked in the true doctrine. But not only that. The object, the purpose, must be clear. If a squadron, or fleet, is sent to co-operate with an army, or an army with a fleet, the object of the expedition must be as clear as crystal. There have unquestionably been cases in which those who sent expedi-

tions were not absolutely clear as to their own intentions in sending them. If the purpose is not perfectly defined, neither the naval nor the military commander can estimate the degree to which he can sacrifice his forces. Nelson, knowing the object of his being sent to the Riviera, seeing the campaign as a whole, is prepared to sacrifice his ships because the situation demands military success. Nogi accepts tremendous sacrifices in his assaults on Port Arthur because he knows that the situation demands the destruction of the Russian Fleet. Togo, knowing the importance to his military colleagues of stopping vessels getting into Port Arthur with supplies, maintains a difficult and dangerous situation, exposing his all-important ships to serious hazards.

Indoctrination of the officer is, then, a factor in obtaining co-operation. There is also, as I said earlier, practical work. It is not necessary for me to suggest to a body of officers the many, the very various, ways in which much can be done in this direction. All I will say is that no opportunity, however small, of doing work together, should be neglected.

We have problems of the future to study, and these can, I believe, only be solved economically and truly if the whole problem of our services is studied in co-operation. No one who has made any attempt to look ahead can fail to see that the changed political situation, the changes in weapons on land, at sea and in the air, have brought with them a necessity for changes in our methods of "compelling compliance" upon an enemy and defending ourselves. The worst possible way of reaching a decision is that of discussion by means of letters in the press in which people who are sublimely ignorant, or prejudiced, are tempted to take part. It is not with such people a case of trying to find out what is best, but to abuse as fools or knaves those who differ from them. Nothing, it seems to me, for example, is a more contemptible form of argument than that in which officers are accused of opposing changes in methods of defence because of the loss of appointments or emoluments of their own Service that would ensue. This is the absolute antithesis of co-operation: it is setting up barriers of prejudice, instead of coming together with a determination to discover what is best.

The processes of bringing this about appear to me to run as follows:—

- (1) Establish a doctrine of war in conformity with the interests, needs, and natural capacities in all their forms, of the Empire.
- (2) Teach this doctrine in the *early* stages of all officers' careers, in all Services. It is a real part of their general, as distinguished from their technical, education.
- (3) Use this doctrine as the basis of the further staff college work at the several Staff Colleges, which Staff Colleges should be not further apart than a man can walk out to dinner.
- (4) Work upon it in investigation of problems of the future.
- (5) Put it into practical operation in the preparation for war.

Every one probably has his own pet solution of how this is to be done. Minister of Defence, Ministry of Defence (these are different),



Combined Staff, Combined General Staff, combined staff training, combined initial training of cadets at a common college. I think I have heard all these argued, and, with respect, I would say ably argued. But do any of them provide the means for establishing a clear national doctrine based upon some foundation of policy? Do any of them furnish the opportunity for scientific study in common? My experience of staff work—I have had some—was that the demands of the constant *immediate* problems absorbed attention and time. If we can get that common outlook upon war, and with that outlook study the past, apply its lessons of all kinds—administrative and strategical—to the future, we shall, I believe, be on the road towards getting co-operation as complete as our defective human nature will allow it to be.

## DISCUSSION.

VICE-ADMIRAL SIR W. E. GOODENOUGH, K.C.B. : Perhaps the words in which Sir John Jervis on his return from his very successful joint expedition to the West Indies in 1794 proposed the health of Sir Charles Grey may be interesting. He said : " May the same cordiality and zealous co-operation in future exist in all the united operations of our Army and Navy which has been so remarkably conspicuous in our late campaigns, which I attribute to a cause we both know and feel—the warm friendship and mutual confidence which existed between us, the commanders, a feeling which also pervaded every rank in both Services." I think it is interesting and important to notice, as mentioned by the lecturer, that that feeling between commanders is, nearly always, reflected in all ranks in the two Services.

The very interesting lecture which Admiral Richmond has given us covers such a vast amount of ground that it is not easy to comment on it without a good deal of preparation, but there are one or two points on which I would ask your indulgence to speak. The first is a self-evident fact, that these Forces which are going to carry out the policy of a country must have existence. The Navy, Army and Air Force are all responsible for their respective operations, and what one may call their deeds; but they are not responsible for their existence. The responsibility of their existence rests with the peoples of the Empire, and if the latter are so selfish (not to use a stronger word) as not to make sacrifices, or if they are so unwise or ill-instructed as not to see the necessity for the maintenance of proper Forces, the responsibility must entirely be theirs. It was Carlyle who said that the ultimate outcome of protecting mankind from its folly was that the world would be entirely inhabited by fools, but I think the British people should be prevented, so far as possible, from committing the folly of not maintaining adequate Forces to carry out the policy of the country.

Another point is the necessity for the unanimity of a considered opinion of professional advisers when given to those in high office. Much thought, and very often considerable self-sacrifice, is needed to adjust any differences. Differences of opinion must occur, but they ought to be adjusted before the considered opinion is given. There is nothing more damning than to have a divided report, or a minority report even. The sympathetic man is at a loss to know what course to pursue when he is given divided counsels, and the unsympathetic man welcomes such a report and points with no small degree of complacent derision to the impossibility of carrying out any policy where combined Naval, Military and Air

Force co-operation is needed when the professional advisers themselves cannot agree as to really what is wanted. In making recommendations it is most important that the considered opinion should be a unanimous one.

CAPTAIN E. ALTHAM, R.N.: My apology for taking part in this discussion must be that I graduated under the Lecturer, and thereby acquired some of the ideas which he has given us this afternoon. I also had for one year to study this problem from a domestic point of view, in conjunction with a soldier and an Air Force officer. We had to consider the various aspects of this difficult problem of co-operation, and reduce to cold print what we have all discussed so very often in colleges, mess rooms and elsewhere, sometimes acrimoniously and sometimes cordially. The three of us were set down to produce a Manual of Combined Operations, and in the course of that year's study and writing we came across, as was to be expected, a certain number of facts and data which perhaps were new. The thing that struck us most was that the missing link was at the top. The lecturer has emphasised very much how co-operation must start at the top—whether between allies or whether between the Dominions, the Colonies or the Services. After exploring the existing machinery for co-operation at the top, one was very much struck by its extraordinary lack of any coherence. In regard to this it is interesting to find that the United States has made an effort to tackle the problem by starting an Inter-Service Board, which brings together, in a very formal way and as a Standing Committee, the heads of the Services and the heads of the Government Departments connected with the Services. That Board is also served by a lesser Committee, consisting of the Directors of the chief departments of the Staffs of the two arms, the Army and Navy; they have no separate Air Force. We have something of that sort in the Standing Committee of Imperial Defence, but the United States organisation seems to be a far more practical form of co-operation between the Services, and to have far more concrete duties and executive powers.

Another thing which strikes one very much is the absence of any combined school for the higher study of war between the Services. The Navy has the War College, which has now done three years' work since the war, and any of us who have been down there realise how our outlook was broadened, and how we were led, by the lecturer, to think of war in a very much wider sphere than we usually have done in the Service afloat. I have heard several distinguished military officers complain that the Army has no analogy to the Naval War College. The Senior Officers School at Woking is avowedly limited to what is really a field officer's course. The Air Force is now making a small start with its Staff College. But it would be a very great advance if there could be something in the nature of a combined War College where the Senior Officers of the Services could meet, where officers who will have to command the Services engaged in combined operations, and those who will eventually become the professional heads of their Services, could study the higher problems of war under one roof and in a true spirit of *camaraderie*. That we might one day get our budding First Lords of the Admiralty and Secretaries of State for War and Air, and even our budding Prime Ministers to come and associate themselves with such a War College, is, perhaps, an unduly Utopian idea.

LIEUT.-GENERAL SIR GEORGE KIRKPATRICK, K.C.B., K.C.S.I.: It is very impressive to hear the lecturer's most thoughtful and forceful lecture, because this subject of co-operation, in all its shapes and in all regions, is really vital to us as British people. It seemed to me, in listening to the lecture, that the key-note of the



whole question lay in those passages in which the lecturer referred to mentality. You cannot get co-operation, in my belief, unless there is a true understanding amongst those men who are to co-operate. When we look at the interests which the fighting Services of Britain have to guard, when we see the oceans, the continents and the air spaces that they have to cover, then we can form but a faint comprehension of the number of minds which have to deal with the subject. There are the minds of the Statesmen of the Dominions, the Dependencies and the Crown Colonies as well as the minds of the Statesmen at home. Those of us who have had to deal with the Statesmen of the Dominions, the Dependencies and the Crown Colonies, have generally found them only too glad to listen to us and to hear what we have to say; but, as one speaker mentioned just now, there is always the danger of divided counsels. That is one aspect which we have to try to get over, and it can only be surmounted by the possession of a knowledge of those men, and that can generally only be obtained from persons who know them or from persons who have seen the circumstances and conditions under which they meet and hold their political life.

Then comes the question of the co-operation of the various authorities of the fighting Services, and, I might add, of the representatives of diplomacy. A staff should be, and generally is, a very faithful mirror of the mentality of its commander. If the commanders know each other, if they appreciate each other's mentality, if they know the difficulties which each will have to face, and, in the case of the Allies, it might be what the national interest will demand, and if their staffs are instructed and know what is in the mind of their commander, then there will be some prospect, it seems to me, of getting co-operation in the executive work. While it is essential that co-operation in the upper planes should be complete, yet without complete co-operation in the executive spheres the problem cannot be solved. These were the main points which passed through my mind as I listened to the lecturer's most impressive address.

THE CHAIRMAN : I sympathise very heartily with the officers who have listened to the extremely interesting address of Admiral Richmond's in expressing their reluctance to get up and discuss it. The reason was very sensibly and briefly explained by Admiral Goodenough when he said that it would take the average man at least a fortnight's study before he would feel himself competent to make any remarks upon such a lecture as Admiral Richmond has given, which really deals with the whole ambit of war, both Naval, Army, and Air, past and present. For the same reason my remarks will be very brief.

Perhaps one of the most impressive parts of the lecture was that in which the lecturer indicated the peace organisation which would be demanded from all sections of the community in order to cope with any chances of success in wars of the future. We realised during the great war that the vast requirements of modern warfare demanded the entire capacity of the Nation both in men and material. What machinery, it will be asked, can be elaborated in peace, to set in motion this instrument, should it be needed? It may be said that a democracy cannot be regarded as a very prompt means for such a purpose. It is not, however, quite certain from past experiences that autocracies have proved themselves more able to wield this power to much greater effect.

The lecturer has laid great stress on the necessity of a common doctrine in the preparation of schemes to meet contingencies. There will be few who desire to dispute this proposition and the contention of the lecturer probably applies with particular force to this Empire.

ADMIRAL RICHMOND : I do not think there is anything to answer. I am very grateful for what General Kirkpatrick said. I agree with him about the difficulty of understanding the mentality of the Statesman and all the problems they have got to meet. All that does emphasise very much the need, which the Chairman mentioned just now, for all of us, seamen and soldiers, getting a little bit outside our profession and going a little into the outer world, meeting other people and understanding what they are thinking of. That is part of the doctrine of co-operation. As far as the means of getting anything done is concerned, I am sure that the real way is to get round a table and discuss things in a friendly manner. I recollect very vividly indeed what a difference it made, after one had been puzzling over difficulties, and perhaps having correspondence about difficulties, at the time we were discussing the Manual of Combined Operations to which Captain Altham has referred, to get together in friendly meeting. It was extraordinary how the difficulties dissolved and melted away when at Camberley we sat down, a great many of us, round a table in the evening and flogged the whole thing out together, hearing each other's arguments and seeing the other man's point of view. A lot of things which seemed extraordinarily difficult—one man or another thinking it necessary to uphold some particular line of conduct because it was in the interests of his Service that he should do so—disappeared when we began talking about what was really the best thing to do in the common interest. Therefore, although the Chairman said he would not like to be on that American Board, now being instituted, for laying down doctrines of war, I think that if it sits round a table and discusses things in the way we used to discuss them at the Staff College at Camberley, it will not find it is quite so difficult a problem to determine the doctrines proper for their country, as it may seem to us just hearing it in the words we have heard to-day.

THE CHAIRMAN : You will join with me, I am convinced, in proposing a hearty vote of thanks to Admiral Richmond for his admirable lecture.

Carried with acclamation.

MAJOR-GENERAL E. T. DICKSON : Before you disperse, I think you will agree with me that it is a very happy arrangement that we have a distinguished soldier in General Sir Charles Monro here to take the Chair when a distinguished sailor, Admiral Richmond, delivers the lecture. I ask you to pass a hearty vote of thanks to General Sir Charles Monro for presiding to-day.

Carried with acclamation.



## SEA-TRAINING OF THE MERCHANT SERVICE EXECUTIVE OFFICER.

By CAPTAIN S. M. DAY, C.B., D.S.O., R.N.R.,  
A.D.C. to H.M. THE KING.

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On Wednesday, 14th March, 1923, at 3 p.m.

THE RIGHT HON. LEOPOLD C. M. S. AMERY, M.P., FIRST LORD  
OF THE ADMIRALTY, in the Chair.

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THE CHAIRMAN: Ladies and Gentlemen, my task this afternoon is to introduce to you Captain Day, who is going to lay before you his views on a subject of immense importance to the country, namely, the efficiency of the Executive Officers of our great Merchant Service. I understand that he is going to deal more particularly with the point of view of their physical efficiency, though of course that is intimately connected with the whole standard which is to be aimed at in order to ensure that, right through, those who command our merchant vessels shall be fully the equals, indeed the superiors, of their competitors in any other Service. That efficiency is, of course, a matter of supreme importance to the trade and to the prestige of this country, because not only the flag that is carried on our men-of-war, but the flag that is carried on every tramp and merchant ship that goes to any port, sustains the credit and reputation of England. From the narrower point of view of the Admiralty it is of no less importance. We know well that the Merchant Marine is the nursing school of a great Navy, and that obviously, while we can always maintain the Navy in times of peace, when it comes to a great war we have to call upon support and help, in an infinite variety of directions, from the Mercantile Service. Therefore, we too are directly and vitally concerned in this question of the efficiency of the officers of that Service. I do not wish to make the suggestion, nor, I think, does Captain Day, that that Service was an inefficient one before the war. We know what magnificent work it did not only in the transport work but in actually taking its part in the operations of war. The measures taken before the war to ensure that merchant vessels should be available as auxiliary cruisers proved, I think, amply justified, and that policy is one which has become a permanent part of our naval policy—justified not only by the general moral effect upon the enemy, but also in actual action. I may perhaps remind those here of an occasion, early in 1917, when the German raider "Leopard" got out and was promptly detected and tackled by the cruiser H.M.S. "Achilles" and the auxiliary-armed patrol steamer, H.M.S. "Dundee," who in a very short engagement disposed of the "Leopard" altogether. She lies somewhere at the bottom of the North Sea to-day. Admiral Beatty said in his report of the action: "The Commanding Officer of 'Dundee' displayed excellent judgment in manœuvring his ship in such a way that he was able to pour in a hot fire for five or six minutes at 1,000 yards before the raider could bring a gun to bear." Our auxiliary merchant captain proved himself more than a master of the opponent that the German Navy provided, and it may interest you to know that the merchant

captain in question is the lecturer to-day. He duly obtained his D.S.O. immediately afterwards, and later on received the C.B. for his very distinguished services. He carried on right through the war both with the armed boarding steamers and as convoy captain in charge of convoys of merchant ships. I am glad to say that, though the war is over, Captain Day has maintained a close connection with the work of the Royal Navy, and I think it is not very long ago since he was doing a course at the War College. At any rate we in the Admiralty welcome those who, like Captain Day, have worked for the close and intimate association of the Mercantile Marine with the Royal Navy, and we wish him well in the efforts he is making to keep the Mercantile Marine up to the highest standard in every respect. I will now call upon Captain Day to deliver his lecture.

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### LECTURE.

1. MY object in addressing you this afternoon is to advocate and press for the establishment of a physical examination, with minimum requirements of first-class constitutional fitness, for future officers in the Executive branch of the British Merchant Service. The reason for submitting this recommendation will be made clear by a review generally of the mercantile marine situation afloat, with particular reference to *the responsibilities* of those in command of ships.

2. In order to afford the maximum opportunity for anyone present here this afternoon—and there must be many of far greater experience than my own—to express his views, it is my intention to be as brief as possible, and by thus allowing time for the subsequent discussion, the report on these proceedings will, it is hoped, afford complete information and guidance for, not only ourselves, but also the great public interested, whereon to base an opinion of their own—and in due course, may it be hoped, voice that opinion with effect.

3. The question of the efficiency of the then existing methods of education and sea-training for boys entering the Merchant Service has periodically in the past engaged the attention of the Admiralty and various public bodies.

I do not intend, for the reasons just given, to make any considerable historical review of the past. A perusal of the many reports on the sea-training and manning of Merchant Ships shows that the great obstacle to any reform appears to have been that the purely technical side was so entangled with the general aspect (including such questions as wages, food, &c.) that vested and political interests became involved all of which necessitated reconciliation, thus making progress difficult, if not, indeed, altogether retrograde. All former enquiries on this subject have been initiated either by Naval officers with a view to a more suitable recruitment for the Naval war-time service, or else by municipal or variously constituted patriotic councils and organisations working with a view of encouraging lads to go to sea. An improved standard, physical and educational, has ever been the desired end, and every

programme has called for grants of money either from Government, ratepayers, or by means of voluntary subscription.

4. This present recommendation I bring before you, on the other hand, contains no proposal to open up this vast subject with all its illimitable ramifications. It is exclusively confined to the technical qualifications for one branch (the Executive), and its demand is that these should be examined and brought up to competitive requirements. My contention is that by improvement of the efficiency of the Executive (the Senior department) you will raise the efficiency and status of the whole of the Mercantile Marine, to the national advantage.

5. We are not going to debate wages, hours of work, or quality of food. These may be supposed to be adequate, or otherwise, without affecting the point at issue, which may be summed up in the question : Is the Junior Officer's physical and educational standard and term of sea service, as required by the Board of Trade, suitable to produce an efficient executive *personnel*?

6. As regards the physical condition : unless we are to assume that no matter how diseased, either constitutionally or by contracted disease, a youth may be, yet he is, nevertheless, as things are at present, an eligible candidate for an officer's position—unless indeed that is assumed, one would think that, as a matter of common sense, some medical survey would be made. Strange though it may seem, as a fact, none is required, excepting that the candidate must have normal vision and be free from colour-blindness.

7. As regards education. The requirements here are purely technical and the standard of general knowledge necessary is very low. From two or three months at a Navigation School is sufficient to acquire all the knowledge requisite.

8. The preliminary sea service consists of four years in the capacity of indentured apprentice (or three years with a " Worcester," " Conway," or " Pangbourne " Certificate); or else four years as a boy, ordinary seaman, or A.B. Certificates of character must be produced, signed by the Master of the ship, to the effect that the candidate has served the above qualifying period. The above briefly summarises the legal requirements. To be more precise, here are the conditions, as set out in the Calendar for 1922, issued by Lloyds, Royal Exchange (p. 467) :—

9. "*How to become a Deck Officer.*—Every boy who wishes to go to sea with the object of becoming a Deck Officer in the Mercantile Marine should make sure that he can pass the Board of Trade sight tests; unless he can pass these tests he will be unable to obtain a certificate of competency. Before a lad can sit for the Board of Trade examination which qualifies him as Second Mate, he must be not less than 18 years of age and have served four years at sea. There are two main methods by which he may acquire the necessary experience :—

" (a) *Apprenticeship.*—He may be apprenticed to a shipowner at the age of 15 or thereabouts.



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"(a) *Apprenticeship.*—He may be apprenticed to a shipowner at the age of 15 or thereabouts.

10. "Many shipowners have discontinued their former practice of requiring premiums on apprenticeship, and this modification makes it possible for boys whose parents might not have been able to afford to place their sons as apprentices, to do so now. Where parents or guardians can afford to give lads special training, a course for a period of two to three years on the 'Conway' (Mersey) or 'Worcester' (Thames) training ship is a good introduction to life in the Mercantile Marine. Two years' 'training' on one of those vessels is counted as one year's sea service for the purpose of the Board of Trade Second Mate's examination.

11. "Certain shipping companies own sea-going training ships in which boys can commence their training for the Mercantile Marine, or to which they can with advantage proceed after preliminary training on board the 'Conway' or 'Worcester.' The fees on board such ships vary considerably. Alternatively, after a 'Conway' or 'Worcester' training, boys can be apprenticed to a shipowner. Some shipowners engage apprentices exclusively from among 'Conway' or 'Worcester' cadets, and many shipowners offer them preferential terms of apprenticeship.

12. "(b) *Alternative entry to become an Officer (Deck Service).*—Lads whose parents cannot afford the expense involved in apprenticeship can qualify for examination for a Second Mate's Certificate by four years' approved service before the mast.

13. "To become a Petty Officer or Seaman, a boy must serve at sea for three years before he is entitled to the rating of A.B. (able-bodied seaman). *No examination is necessary for this rating.* He may afterwards qualify by service for employment as boatswain or other petty officer. With an additional year's sea service he may sit for a Second Mate's Certificate of Competency.

"As a result of the growing popularity of the Mercantile Marine as a career there is considerable difficulty in finding vacancies for apprentices at the present time, and it is advisable that parents and guardians should endeavour to place boys on the waiting list of a shipping company at least a year before they are of an age to be indentured."

14. Before venturing any criticism or proposing an alternative system, I submit that it is necessary to bear in mind that a Nation's Merchant Service—unless subsidised—is dependent on its competitive efficiency. For Great Britain, an efficient Merchant Service has greater relative importance in peace or in war than it has for any other nation. We will outline, therefore, the qualifications that other nations deem necessary to the training of their officers—nations, that is, which are our competitors in peace, and may be our antagonists in war.

15. *Sweden.*—Government and shipping companies share between them the expenses of a foreign-going, three-masted sailing training ship—for officers only. Further, a second ship, supported by private bodies,

trades from May to September in the Baltic for the same purpose. Forty-two months (of which at least 12 must be spent in sailing vessels of over a 100 tons) is the qualifying service for junior officers.

After two years of the above sea-service, a medical examination is made, and candidates sit for junior officers' certificates, which, automatically, on completion of apprenticeship, are confirmed. For Master, a further medical survey is held.

There is a Royal Naval Reserve. It is to be noted that evidently "Swedish Drill" is not deemed as the equivalent of sailing-ship exercise; and also that the recurrent medical examination of officers (Merchant and Naval Services) exempts only Naval Captains promoted to Admiral.

16. *Norway*.—Norwegian Shipowners' Federations discussed (1921) the necessity for the improved training of officers and men in the Merchant Service in Sailing Training ships. There are State Nautical Schools for Officers. All qualifying sea service must be in the foc'sle—there is no system of apprenticeship. Naval Officers must serve 21 months in sea-going Merchant ships before the age of 20 years, when they become eligible for the Naval School.

17. *United States*.—Apprenticeship for three years is the regulation. The auxiliary square-rigged "Newport" and other similar craft, carrying about 200 boys each, afford a two-years' training (free). A war-time abbreviated intensive system has admittedly cut into the standard of efficiency, and is reflected by higher insurance premiums on cargoes in U.S. bottoms.

18. *Japan*.—Candidates for officers must enter by competitive examination. Tokio Mercantile Marine School provides a (free) course of study, which lasts three years, and includes about four months in sea-going sailing ships, carrying about 120 boys each. Then follows about two years in a foreign-going steamer, when a fourth officer's certificate may be obtained.

The above candidates form the Japanese R.N.R. There are some ten other provincial nautical schools (for men under watch-keeping officer's rank). Stringent medical examinations are held periodically. Lower deck ratings are not eligible for officers' certificates.

Naval Officers are trained throughout at State cost.

A fleet of five tankers and 12 transports is manned throughout by Naval ratings, in order to give them a knowledge of Merchant ships, how to handle single-screwed vessels, and improved opportunities for travel experience.

19. *Denmark*.—Candidates for officers (Merchant Service) must serve three years at sea, of which one must be in sail. There is a physical examination (moderate) on entry. Additional to the above, a course of study in one of the three or four Nautical Schools is requisite, of about five months' duration, which may be taken in two parts. Candidates for Officer (Navy) must serve for at least two months as sailor

boys on the lower deck—then follows tuition for competitive entry as midshipman. The Danish Admiralty have expressed regret that funds prevent the inclusion of six months' sailing ship training in the Midshipmen's course of instruction.

Mr. H. N. Anderson (formerly shipmaster for a number of years in sail), in order to ensure the best training for the officers in the Fleet he now commands (the 18 Diesel-engined ocean-going vessels of the East Asiatic Company), has had built by Ramage and Ferguson of Leith, the five-masted sailing ship "Kobenhaun" (now on her first voyage to 'Frisco), where all his future officers will serve their apprenticeship. This is the largest sailing ship built on the East Coast, and is unique in being the first to be fitted with an auxiliary Diesel motor engine capable of giving about 6 knots in a calm, and with a two-bladed propeller of the feathering type. The principal dimensions of the ship are: 390 feet overall, 49 feet beam and 28 feet 7 inches depth, while the dead-weight carried is over 5,000 tons. Ample accommodation for cadets or apprentices has been arranged in a separate house on deck. There is electric light and wireless. An interesting feature of this vessel is, naturally, the masts and sails: the five lofty steel masts with their long steel yards, the lower ones being 90 feet long.

The difference to a boy that this field of activity aloft makes—a boy otherwise without opportunity of ever leaving the deck-level, and deprived by the circumstances of his calling of football, cycling, or running exercises—can be imagined. Some 90 per cent. of the British boys at sea fall into this latter category.

20. *Germany*.—The German system for training boys for officers is fully set out in "Report of the Fourth British National Conference on Sea-Training" as a pattern to be followed. These are the words of the President, Mr. Geoffrey Drage, in October, 1913:—

"Our work has been to bring to the knowledge of this country the work of our great competitors, our Teutonic cousins across the North Sea. The Germans have acted upon a system which I frankly confess seems to me excellent in any ways. Sea-power is the one thing to which this Empire owes its being; Sea-power depends not only on a large Navy and a large Mercantile Marine, but on possession of a large Maritime population following the sea."

The Marquis of Graham, on the same occasion, said this:—

"To my mind, you would do much better than training in stationary ships, if you worked through a ship like the 'Port Jackson' and asked her to carry your boys."

Lord Mersey said also on this same occasion:—

"I would like us to have the system that they have in Germany."

Lord Brassey stated :—

" I say the best training for the sailor is the sea-going ship."

Admiral Sir U. Noel concisely put the situation thus :—

" Officers and men should have maximum sea experience, sails are not in the question, except as a means to an end, for which no other could be an effective substitute."

" The Captain who will best handle the ship of the present day and fight her with success will be the one who possesses the maximum of sea-going experience."

" Masts and sails beget intelligence, smartness, fearlessness, readiness of resource and activity."

The British Sailing-Ship Owners' Association (Annual Meeting), 1920, said :—

" The sailing ship was the only real training ground for sailors. If it disappeared, the nation lost a great asset."

Briefly stated, Germany selects her officers for the merchant service only after three years' apprenticeship, of which at least 12 months must have been served in a square-rigged, foreign-going ship, and the physical and educational tests are more severe than our own. The German shipowners themselves have petitioned the Government not to allow the 12 months' sailing-ship service to be dispensed with.

21. *Holland*.—For entry as junior officer in the Merchant Service, a boy must have completed about nine years' primary and secondary education. Then, being from 15 to 17 years of age, he enters either (and for preference) the Amsterdam Preparatory School for Navigating Officers, at a fee of £50 per year; or else one of a number of Provincial Nautical Schools, at a fee of about £35 per year. Government and shipping companies pay the balance of expenses of these schools.

Boat and sail drill takes place on the Zuyder Zee, the boys at that stage being about 17 years of age. In the grounds of the Amsterdam school is a three-masted, square-rigged ship, completely fitted with sails, which is used for drill purposes.

Sails are unbent, yards sent down, and masts unstepped for exercise. After two years in the school, 100 " sea-days " in foreign-going steamers is requisite, followed by a further three months' study at the above school, before qualifying to sit for the Junior Officer's Certificate. The Officers (Deck) are very well educated, and are also medically surveyed every five years.

22. As shown by the above systems, in the Mercantile Marine of foreign nations a higher standard examination, comparatively with ours, is in force; producing therefore, it must be supposed, a better type of individual to officer the ships.

In making a comparison of any foreign system of sea-training with that of our own it should be noted that, until recent times, Great Britain had in her Merchant fleet of sailing ships an automatically acting examination and eliminating process unsurpassed, which rejected



mercilessly all the unfit physical material. Our present problem, with a merchant fleet of steam ships, is to discover an alternative system that will provide an equivalent training and test for the nerves, and a form of exercise requisite for the youngsters' growth and well being, in order to eliminate that unfit percentage (about 40 per cent.) corresponding to those that the old system weeded out and definitely rejected.

It must be borne in mind that the lad in shore occupation can, with others of his own age—the only suitable companionship when off duty—exercise each week-end in football, cycling, cricket, etc., whereas his contemporary at sea is without opportunity for exercise other than that his routine manual labour may afford. The apprentice is left entirely to his own devices, and his educational and physical well-being are no one's concern but his own. This is not training the youth; it is simply letting him drift; and it tends, and can only tend, to dwarf him mentally and bodily. It means accepting all he can give and giving nothing in return. It is the negation of the first principles embodied in the curriculum of any other service which enters youths as beginners therein, none of whom can have greater prospective responsibilities than those who enter in order eventually to command our ships. The welfare of the indentured slave was of more concern to his master than is that of the indentured apprentice of the present day to the owner of his labour. There are very few companies who can point to adequate supervision in the above respects of their apprentices during the three or four years' indentured service. I suggest that apprentices should not be carried except in those ships where a system of training obtains. The P. & O., Canadian Pacific Railway S.S. Co., R.M.S.P. Co., Alfred Holt, Brocklebanks, New Zealand Shipping Company and a few others afford examples to be followed. Here a boy, if it is in him, has an excellent chance to hold his own in after-life creditably, without that otherwise permanent handicap of four years' mental stagnation at his most receptive age.

In all ships the apprentices should have a separate mess-room (unless they are messed in the saloon) and have living quarters, including bathroom, etc. They should assuredly not, as regards this latter point, have to share in common—as is the case in nearly all those ships carrying two apprentices only—with lower deck ratings, who may be of any nationality and colour. Frequently have parents withdrawn their sons by reason not so much of the roughness of the work as of the domestic squalor to which the lad was consigned in so many of these "tramp" homes. The actual contract for cargo steamers usually reads thus:—

"That the said A. B. C. hereby voluntarily binds himself Apprentice unto the said Company and their Assigns for the term of four years from the date hereof: And the said Apprentice hereby covenants that, during such time, the said Apprentice will faithfully serve the said Company and their Assigns and obey the lawful commands, both of the said Company and their Assigns and of all officers of any vessel on board of which he may be serving under this indenture, and that the said Apprentice will not absent



himself from their service without leave. In consideration whereof the said Company hereby covenants with the said Apprentice that during the said term they will and shall use all proper means to teach the said Apprentice or cause him to be taught the business of a seaman as practised in steamships, and provide the said Apprentice with sufficient Meat, Drink, Lodging, and, except in Great Britain, with Medicine, Medical and Surgical assistance, and pay to the said Apprentice the sum of £60 in manner following (that is to say), for 1st year's service, £10; for 2nd year, £12; for 3rd year, £18, and for 4th year, £20, together with a further sum of £5 payable after satisfactory service for the term of this indenture: and 12 shillings yearly in lieu of washing, the said Apprentice providing for himself all sea-bedding, wearing apparel and necessaries (except such as are herebefore specially agreed to be provided by the Company) . . . and for the performance of the Covenant on the part of the said Apprentice herein contained the said surety doth hereby bind himself, his heirs, etc., unto the said Company in the penal sum of £10."

The words "They will and shall use all proper means to teach the said Apprentice, or cause him to be taught the business of a seaman . . ." (unless purposely meaningless and therefore better left out of the contract) would appear to signify that the Company engage to make some conscious effort to ensure that the said Apprentice should be given some description of technical instruction. This, it follows, would involve supervision, including an examination to ascertain what knowledge has been gained. Parents undoubtedly indenture their sons on the supposition that he will be taught something in lieu of his receiving the wages corresponding to his labour. As already stated, in perhaps a half a dozen Companies only is there any pretence of anything of the sort. That many masters and officers take an interest in these boys, goes without saying, but this is besides the point; there are also very many who do not, and the normal result is that the youth's development as an officer is stagnated for four years—to his permanent detriment and, with wider consequences, to the detriment of the executive branch as a whole.

The real situation is *camouflaged* from the general public by reason of a faith inherited from past traditions. People do not yet realise how nearly the war was lost in April, 1917, and that the seamen of the future, less well trained than those in former time, cannot be expected to equal the former standard. It is a misfortune that there is in existence no nautical technical society which, owing to its commanding public confidence, as being free from any political or trade union bias, could be consulted for expert advice. The establishment of such offers surely a befitting object for some wealthy patriot! Here is his chance! The appointment at the Board of Trade of a Mercantile Marine Officer, comparable to the First Sea Lord at the Admiralty in regard to active experience and also in term of office, is to be recommended, so as to leaven and counter-balance the civilian control

by members who have no professional knowledge of those for whom they legislate.

The Board of Trade, through the Local Marine Boards—which, it may incidentally be remarked, have no shipmaster necessarily in their constitution—are authorised “to facilitate the making of apprentices to the sea-service.” In doing so they appear to have opened wide the door of entry into the profession while giving no thought as to how many may enter, or who they may be, or what may become of them.

As was remarked once in an analogous case by Lord Randolph Churchill in regard to our official methods in Whitehall—

“The object of administration is the maximum of efficiency consistent with legitimate expenditure. Can any practical amount of efficiency of administration be obtained without professional training and knowledge? Can it be obtained without personal responsibility. Can direct personal responsibility be expected without professional control? The answer to all these is—‘No.’ The unsuccessful soldier or sailor is ruined if he fails. The unsuccessful politician is only transferred to another office, a foreign embassy, a Colonial Governship, or the House of Lords. No punishment such as falls on the sailor or soldier falls on him.”

It is not until about middle-age that the importance of a sound constitution becomes most evident; when, as shipmaster, the officer has frequently to con his ship like a pilot—for many consecutive hours or several days at a stretch—along a foggy coastline, or through Atlantic ice. The safety of the ship, and perhaps that of a passing ship in addition, during those prolonged periods, is proportional to the experience and alertness of him who orders the quick turn of helm or change of speed to meet whatever situation may arise. Likewise, in event of salvage; damage to ship or cargo by sea, fire, or collision, it is obvious that if the Master lacks decision, or ability to sustain long strenuous hours, no matter how excellent the crew may otherwise be, the issue must inevitably be unsuccessful, if not disastrous. Probably in no other vocation does the safety of so much life or property so frequently hinge on the correct exercise of an individual judgment in the course of daily routine, as in that of the ship-master, or officer on the bridge. And is not also the seaman on the look-out, or casting the lead, an important unit of the situation? As the shipping tracks become more and more crowded, and with higher speeds becoming more and more usual, and affording fewer warnings of danger, this point has increasing importance. The Ship Commander meets in each Marine invention, irrespective of its merits, something which exacts greater expectations and entails added responsibilities. Our forefathers had not to and could not, for instance, command a ship carrying over 5,000 persons, or in a flat calm drive into a ledge of ice at express speed. Now-a-days discipline, and every sea-going qualification, is more subjected to extreme test than was ever possible previously, and particularly so when under war conditions.

The Master is the head of all departments and member of none; he represents the owner to the crew and the crew to the owner and cannot associate with his position the independence of either employer or employee. Whilst modern invention insensibly centralises control in the master, the contradictory tendency of the age is to destroy his authority. Discipline and a suitably trained staff is the sole solution of the problem. The master is also agent and representative of many and diverse interests. Employers, Admiralty, Board of Trade, and Lloyds, besides home and foreign port authorities, independently issue orders or instructions for his professional conduct, and, where such may apply, they issue instructions, to be put into practice by his crew, in regard to which they all, respectively, hold the master responsible.

That the master is not represented by one of his kind either in the Admiralty or the Board of Trade is an anomaly, and perhaps accounts for the contradictory nature of the advice and instructions the master receives, more particularly in times of emergency, when an unequivocal line of action is of paramount importance.

The above duties are inseparable from the nature of the conditions of sea-service, and it must be presumed cannot exist otherwise than by being invested in the master of the ship.

By thus enumerating the many interests concerned it is simply desired to show how a thorough training for this responsible position would redound to the national advantage.

23. I consider that this provision for physical and seamanlike training so necessary and immediate, that the question of a higher educational standard should be deferred for subsequent consideration.

24. The Board of Trade, which is the department of State responsible for efficiency of sea-going *personnel*, declares in effect that the physical condition is of immaterial consideration. They do not appear to recognise it as a duty of theirs to ensure that any officer or man in charge of the bridge, or on the look-out, should have even average good health. As the men on the look-out, or at the wheel, or in the chains, are certified by the Board of Trade as qualified for such duties, without the necessity of any technical or other examination, or, indeed, of any inquiry as to whether they have ever performed any of these duties previously, it is consequently the more urgent that the officer in charge on the bridge should be of indisputable physical capability. In this want of precaution the Board of Trade is at variance with the Navy, Army, Air Force, Police, and of every other disciplined body, not to mention such callings as railway and motor services, the authorities for which carefully and invariably scrutinise the health of all their principal employees.

25. What, then, is the reason for the Board of Trade's passive attitude as regards this question, which was referred to them for consideration last July through the R.N.R. Advisory Committee? That Committee, you may be reminded, was constituted by the Admiralty in 1921 "to advise on general questions affecting the R.N.R., and through it the Mercantile Marine."

26. The Board of Trade replied in these terms : " The improvement in the all-round efficiency of the deck officers is one with which everyone would be in entire sympathy and that the Board of Trade would willingly help any well-considered plan which led towards this end. The Board, sooner or later, of course get to hear of most of the troubles of the Mercantile Marine, but apparently they do not know of cases in which the physical inefficiency of deck officers has led to serious consequences."

27. The inference to be drawn from the above reply is surely that, while professing an interest, the Board of Trade acknowledges no responsibility of its own to keep up to date and initiate relevant investigations.

28. I submit that no commercial organisation could afford to take so detached—one might say, so casual or lethargic—a view of the efficiency of their *personnel*. In fact, all first-class shipping companies have a senior shipmaster—termed " Marine Superintendent "—in their councils. A commercial concern does not retain an employee solely because it has funds wherefrom to pay his salary, but simply because it cannot afford to dispense with his services. Many shipping companies, also, have long since instituted a medical examination of applicants for officers' appointments; though this, in itself, in no wise prevents the rejected applicants entering some other Company; nor does it check the growing influx of the unfit passed by the Board of Trade.

29. It follows that, under present conditions of entire absence of any legal physical examination of the officers, or of any physical or technical examination of the men, an erroneous cause may be assigned to many a marine casualty. A light not reported, or the fog-signal of a ship or of a coast station not heard, that is at present attributed to any other cause than that the look-out had impaired vision or hearing. Stranding of the ship, or the loss of anchors, etc., is assumed as the result of any cause except that the individual taking the soundings had never previously cast the lead. That boats are not expeditiously lowered, and the lives they are provided to bear pulled to safety, is never attributed to physical incapacity or to the technical ignorance of those directly physically responsible. It is the master—upon whose shoulders falls the onus of accounting for every accident—that is brought to trial by the Board of Trade—and maybe, further, he loses his certificate.

To perpetuate this system makes many a scapegoat, and, too, from among those whom the Service can least afford to lose.

30. A shipmaster should be tried by his peers, so that the verdict may be founded on an appreciation of the situation by practical and competent judges, analogous in status to the members forming a Court Martial.

31. As was the case in a recent accident, the master may be held guilty for lack of discipline. Discipline pre-supposes a physical capacity and sufficient training to perform any manœuvre or operation ordered. Too frequently the orders are not understood, or, if understood, cannot be carried out. For instance, if a man has never lowered a boat or

pulled an oar in his life, what is his usefulness when the operation has to be attempted in darkness and in a sinking ship? The Board of Trade certifies such men as fit for the work by hundreds and thousands; and when the inevitable occurs, they oracularly find that "the system failed." Is it not rather that lack of system penalised all concerned? The master, or chief officer, formerly examined the ordinary seaman before rating him A.B. Since 1906 the Board of Trade has put this into civilian hands, which rate him without examination. It is relevant to observe that, although any certificated officer can be dismissed the Service for incompetency or misconduct, such is not the case with a man. What representation of the sea-going *personnel*, I ask, has the Board of Trade in its Marine Department? Is it unreasonable that the shipmaster should ask for an up-to-date representation on the Board, seeing that it issues so many dozens of Acts or regulations wherein fine or imprisonment is sanctioned for the shipmaster, in the event of any infraction thereof? The shipmaster also desires direct representation at the Admiralty, to ensure a better understanding in war measures recommended by them. Lack of representation indicates lack of recognition and breeds lack of confidence—a fatal atmosphere in which to design or carry out a war programme. There is no direct *liaison* between the White and the Red Ensign: their flags fly side by side from the Cenotaph—a symbol indeed of the immediate and continuing co-operation needed.

32. The fact is, officers as such are not recognised by the Board of Trade. There are—except for the masters—only "seamen" in the Merchant Service. The official frame of mind is best illustrated by the Board's regulations, of which the following is an example—

"Board of Trade regulations as to care and maintenance of distressed British Officers and men: Art. 2. The expression seaman includes apprentices to the sea service and every person (except masters and pilots) employed or engaged in any capacity on board any ship."

"Art. VIII. Distressed seamen may, if necessary, be supplied with clothing and bedding, but in no greater quantity, or of better quality than is absolutely required."

"Officers are to be furnished with clothing of the same quality as that supplied to seamen. Medical advice and medicine may be provided when necessary." That means practically, dress the officers like the men—we don't recognise the officer and so why should his men?

Regulations such as these are destructive of respect for superiors; they ruin their authority; they make discipline an unknown quantity. Also, officers of all departments should be allowed precedence over the men when signing-off or signing-on, and not be compelled to wait for hours in a common *queue* for their turn.

33. Further, too, is not the Merchant Service a part of the Empire's first line of defence? 12,685 Mercantile Marine officers during the late



war served under the White Ensign. We see indicated, surely, that our Merchant Service ranks and ratings are in increasing proportion likely to become an integral part of our sea-fighting force.

34. In future wars the Naval issue will depend less on successful destruction or immobilisation of the enemy fleet, than on the discipline resource and good seamanship of individual Merchant ship units. Our ships cannot, either in peace or war, hold their own successfully unless those in command are trained to at least the standard of the foreigners who will compete with, or combat against them.

35. By the extracts already given from Lloyd's Calendar we see there are far more apprentice applicants than vacancies; and also it is seen that, in addition to the cadets from the nautical establishments "Worcester," "Conway" and at Pangbourne, opportunities exist for a numerous and increasing recruitment to officers' rank of boys from the forecastles. They are the boys who, in former days, would not have attempted sea-going under the exacting routine of masts and sails; boys of no education and of unknown physical stamina; boys of the reformatory type, and inclusive of those who, as chronic unemployables in any job where intelligence or exertion is entailed, have simply "drifted" to sea-life as a last resource. Boys from the forecastles should, of course, not be excluded solely on that account, but nevertheless there are obvious reasons for the need of an intelligent selection from the superabundance of those available, in order that the most desirable candidates may not be driven out of the profession by reason of having undesirable associates, or because of too much uncertainty of employment. To encourage a supply greatly in excess of the demand is an expedient sure to re-act by finally leaving to the profession that residue most susceptible to objectionable and extremist organisation and tactics.

36. The present system is too comprehensive. It acknowledges the existence of no undesirable element whatever. It is not Democracy or Socialism—it is unconscious Bolshevism—and points undoubtedly to a lack of intelligence on a matter of vital national importance. The present system is the antithesis of the method of the sailing-ship period—which eliminated the C 3s.

37. Where lives and property are dependent on the accuracy of judgment and keenness of vision and hearing, and on the bodily alertness of those in navigational control, is it not negligent—I use no stronger word—to enforce no provision that these qualifications obtain? That is a question for the travelling public and the shipping companies to decide.

38. Speaking within the limits of my own 34 years' sea-experience in sail and steam, we are descending to a lower standard in executive ability than Holland, Germany, Denmark or Japan. An authoritative criterion on comparative merits would be not only the opinion of other shipmasters, but also the opinion of pilots who daily board and handle foreign ships. I venture to think the majority would confirm the views herein submitted.



39. There is the certainty that foreign countries, by their systems as outlined above, select from the best of their stock to officer their ships; and, no matter how excellent the other branches of a ship's company may be—and in my judgment the engineering and catering departments of British ships are immeasurably superior to their competitors—or how seaworthy and well constructed the ship herself may be, the safety of the ship and all she contains, and her profitable adventure, is finally dependent on her Commander's seamanlike, disciplinary and leadership ability. Prolonged experience at sea, in the practice of exercising responsibility, commencing from early youth, combined with the inherent love of the sea (a racial heritage we possess in plenty), is the foundation whereon to develop the character requisite in such a position. Scholastic education, *per se*, is a secondary consideration.

In peace—in any emergency afloat—a live, or indifferent, leadership decides the issue. In war—the personality of the Captain may easily prove the deciding factor.

40. It is only necessary to recall as typical instances of what leadership meant in the late war those of the "Wandle," "Otaki," "Clan McTavish," and "Anglo-Californian." Supported by good crews, these ships obtained moral and military advantages. In this type of naval warfare—the warfare even more of the future than has been the case hitherto—lies the fate of our Island Kingdom.

In command of each unit there must be an assured competency, the first qualification for which is to feel completely at home amid the elements of sea and weather, which elements are of incalculable variety, and form a prime consideration in a Ship Commander's every action and every decision.

41. Science can no more expect to negative the decisive bearing of sea and weather on sea operations, than the League of Nations is able to negative prospects of future wars.

Seamen cannot be made by an intensive process and no sufficient warning of the next national emergency will permit of our remedying the existing conditions of deterioration by default.

42. I have said this is a question of national importance. An adoption of my submission would surely result in greater safety for the travelling public overseas; lower insurance rates for the shipping companies; and a superior standard of officer for Admiralty service in wartime. Let us bear in mind also that our foreign competitors, in spite of economic difficulties worse than our own, have nevertheless not begrudged the time nor the expense to carry this precaution into effect.

The conclusions to be drawn from the foregoing are, I submit, these—

1. That owing to practical extinction of sailing-ships, no eliminating process now exists to exclude instances of the most unfit *personnel* from becoming officers.

2. That a superabundance of applicants renders a physical eliminating examination possible, without there being, as the result, a likelihood of a too limited supply.

3. That no question of additional expense is hereby entailed.
4. That Great Britain—to whom her Merchant Ships have higher relative importance than any other country—is, nevertheless, behind her foreign competitors by lack of a system to meet the changed conditions.
5. That a member of the Executive sea-going *personnel* should be attached to the Admiralty and to the Marine Department of the Board of Trade.
6. That although State interference is not advocated—indeed is considered most undesirable—State legislation as now obtains with regard to examination must be brought up to date.
7. That this point is one of national importance, seeing that the merchants ships—not less than men of war—would be armed and form an integral portion of our first line of defence in future wars. Single ship actions against raiders, submarines and aircraft will be the dominating feature of sea warfare from now onwards.
8. That improved efficiency at sea means lower insurance premiums for the shipping companies; better shipmates for the seamen; greater safety for the travelling public, and finally, the only guarantee of continuance of our Empire's prestige, if not indeed of its very existence!

(Mr. AMERY having received a message to attend the House of Commons, the Chair was taken for the remainder of the meeting by ADMIRAL SIR REGINALD G. O. TUPPER, G.B.E., K.C.B., C.V.O.)

#### DISCUSSION.

THE CHAIRMAN (ADMIRAL SIR REGINALD TUPPER): Ladies and Gentlemen, I have to inform you that the First Lord of the Admiralty has been called away to attend a Division in the House of Commons, and I find myself in the Chair. I am sorry, therefore, that you will not have the benefit of hearing the First Lord speak again in criticism of this most admirable lecture. I think we must all give the greatest credit to Captain Day for the admirable way in which he has placed this subject before us.

I will now ask any lady or gentleman present to make any remarks on this lecture, and anything I have to say will come at the conclusion of their remarks.

CAPTAIN W. F. CABORNE, C.B., R.D., R.N.R.: I deem it a privilege to say a few words in connection with this interesting subject. With regard to the training of Mercantile Marine Officers, the "Worcester," the "Conway," and Pangbourne College all provide an excellent education and fit cadets very efficiently for the sea. The "Port Jackson" was an excellent institution, because there is nothing equal to training in sailing ships, although they are now practically out of date. When I first went afloat, in 1865, in the then well-known frigate-built East Indiaman "Hotspur," the training which we in the midshipmen's berth received was identical with that given in the "Port Jackson" so many years later. When a considerable premium is paid for apprentices with a view to their becoming officers, and they are not properly instructed, then it is a swindle. A good pension fund, confined to British subjects, would be a great aid to discipline. It should be in two divisions, one for masters, mates, and engineers, and one for other ratings, and should be contributory on the part of the Government, the shipowners, and those to be

insured. A medical examination for fitness would then be a matter of course as is now the case with regard to the Royal Naval Reserve, the "Worcester," the "Conway," and Pangbourne. A continuous service scheme is being mooted, but while there are great difficulties in the way, if they could be overcome, it would be an excellent thing, as has been proved in the case of the Royal Navy. I have always opposed the granting of certificates as master, mate, or engineer to aliens; owing to the Great War that has been checked, and I sincerely hope that we shall never revert to previous conditions. Mention is made in the lecture of the interdependence of the Royal Navy and the Mercantile Marine. That is a point which I emphasised in this theatre a quarter of a century ago, and which since the Great War has become a generally accepted truth. Whatever may be the alleged or implied shortcomings of the *personnel* of the Mercantile Marine, it is absolutely certain that it did not fail the Empire in its recent time of great need.

As to what the Royal Naval Reserve did during the war, I will only say this, that it fully justified, and more than fully justified, its existence. I am getting old and I may not see it, but when the next great war occurs (and come it will, the League of Nations, in which I do not believe, notwithstanding), I am confident that the Mercantile Marine in general and the Royal Naval Reserve in particular, will again not be unmindful of the old and great patriotic motto: "For God, for King, for Country."<sup>1</sup> And I would like those who take part in the discussion to give their opinion in regard to the adoption or otherwise of the lecturer's suggestion about physical examination for the officers of the Mercantile Marine. We want to have that point specially discussed.

ADMIRAL W. H. HENDERSON: I should like to support the two propositions that Captain Day has put forward so temperately as regards the officers and men; they are both imperative. I have made many voyages in merchant ships of every description, and the one conclusion that I came to was that if the Mercantile Marine is to be put in an efficient state it should adopt what we have in the Navy, a form of continuous service system. I was very pleased when I saw that Sir Ernest Glover brought this subject forward at the meeting of the Chamber of Shipping. I have never met an officer of the Merchant Service who did not agree with me, that not only would such a system improve the condition of the Service tremendously, but it would give the officers what they ask for more than anything else—that is, control over their men. It would improve the discipline, and, so far as the men themselves are concerned, it would raise the profession as a whole. There is really no professional standard amongst the merchant seamen generally. There are many fine men among them, but we want to make them more of a self-respecting profession than they are at present. I know there are difficulties, but those difficulties may be overcome, particularly in the case of the big steamship companies. Some of the smaller companies may have to co-operate in order to carry out such a system. There is no reason why the system we have in the dockyards should not be applied—that is an establishment system. A certain proportion of men are put on the permanent list and remain there till they are 60, and it is an object among the other men to reach that list. Something of that sort would save the

<sup>1</sup> NOTE.—As long as I can remember there has always been a succession of merchant shipmasters at the Board of Trade in the post of Professional Adviser to the Marine Department. As regards Official Inquiries, from long experience in the Wreck Court, I am quite convinced that the present system offers greater safeguards to all concerned than would the lecturer's proposal.—W. F. C.

difficulties there may be among the very small lines and shipping companies. A certain proportion of them at any rate would be established and would form a permanent body for the rest to try to reach.

COMMANDER A. F. G. TRACEY, R.N.: I have been asked by my managers to say a few words, and I particularly wish on behalf of Messrs. Devitt and Moore to endorse Captain Day's remarks. Mr. Devitt, the Chairman, is unfortunately absent through ill-health; he intended to be present to-day and he has asked me to say that he is in full sympathy with the ideas that the lecturer has laid down. Naturally, in my position (and I notice that Captain Sayer is here representing the "Worcester") we have had to meet a great deal of criticism from parents on the point of the after-care of young officers in the Merchant Service, more particularly of course in connection with the terms of apprenticeship; and it is very difficult to give satisfactory answers. As to the physical fitness, Pangbourne and the other training establishments pay great attention to that in the first instance. I believe that we in common with all the others insist on a high standard of entry. I have no hesitation in speaking for my own establishment in recommending parents that, if a boy shows himself to be in any way unfitted physically or otherwise for the sea, to remove him to another sphere of usefulness. Three or four weeks ago there was a great deal of correspondence in the *Observer* on this subject. I do not think the Press as a rule is inclined to give place to the Mercantile Marine, and I think a great deal of the difficulties of the Mercantile Marine are due to that cause. I suppose they consider that the Mercantile Marine is not sufficiently a matter of public interest, and I think a great deal could be done to educate the public by securing more interest in the subject from the Press. I recently had to address a number of parents on the subject of these articles in the *Observer*, to which my managers had written a reply, when the usual thing happened. The subject was a big one. I imagine that the Editor of the *Observer* was flooded with correspondence expressing all sorts of views and opinions, many of which were quite apart from the question; so that when the letter from my managers reached the *Observer* they said that the last page for insertion in that issue was already in the press and the correspondence must be closed.

Generally speaking, the articles criticised the care of apprentices. The general attitude was that a boy went to sea and that he was nobody's child. That was the main point of criticism—that the companies did not care in the least what happened to the boy. The letter which we wrote to the Editor of the *Observer* was as follows:—"Our attention has been called to the article on 'the Apprentice at Sea,' by your Shipping Correspondent which appeared in the *Observer* on Sunday, 11th February, and to the resultant correspondence published in your issue of the 18th instant. We enclose a copy of the prospectus of the Nautical College, Pangbourne, from which you will see that this firm has identified itself with the problem of training future officers for the Merchant Service since the year 1861 and more especially since 1890 in the firm's sailing vessels trading with Australia. You will also see the names of a number of leading British steamship companies who lend support to this scheme of training. We fear there is a good deal which is true in what your Correspondent states. At the same time his criticisms are unfair to many companies who are carrying cadets or apprentices to-day. Governing the subject which your Correspondent raises there are two points of paramount importance. One is, do Captains and Officers take a real interest in the boys? While the other is, do the boys themselves show keenness to learn and determination to master their profession? It was with the object of inspiring cadets with the desire to continue their studies and raise the whole

educational standard of intending officers that the Nautical College, Pangbourne, was founded. The lack of supervision and care which is referred to by your Correspondent no doubt does exist in the ships of certain companies, who perhaps do not realise that the proper training of their future officers is a matter of insurance for the future safety of their vessels. There are many steamship companies who regularly receive cadets from the Nautical College and elsewhere, and who, through their masters and officers, see that the boys' instruction and education are properly carried out, and their moral and physical development intelligently supervised. We quite agree that it is the duty of parents to inquire very carefully as to the conditions of training which prevail in any steamship company before indenturing their sons to that company. In this respect we take a personal interest in every cadet who obtains a 'Passing Out Certificate' by advising him and assisting, as far as possible, to obtain an apprenticeship in the right type of ship, and, further, by studying his interests while he is serving his time at sea.

"We have a working arrangement with several leading companies who realise the importance of the proper supervision of their cadets, and who at the end of each voyage require reports from their captains as to the progress made by cadets, and we suggest that this course should be universally adopted. As to the work on board, and having regard to the statement that many owners 'simply regard the apprentice as cheap labour,' one company to which we send cadets writes us: 'If ours don't (*i.e.*, 'clean brass,' &c.) we immediately want to know the reason. They do everything. They paint, chip, swab, trim, coal, splice, rig derricks, overhaul boats, act as quartermasters and so on. Later they take charge of a hold under the supervision of an officer, and learn stowage of cargoes by stowing cargo. They learn navigation by having to put in daily sights to the master, and by going on watch with an officer near coasts, fixing the ship with their own cross bearings entirely independently of the officer on watch. They learn seamanship by actual questions on the bridge put to them by the master and officers alike. They learn the construction of their ship by being made to go through tanks, double bottoms, under the ship in dry dock, and anywhere else where there is knowledge to be got. Any signalling on board is done by the midshipmen. They man and drive the motor boats; they have sailing boats of their own.'

"After our many years of experience in training boys for the Merchant Service, we know that the right sort never object to hard work on board, provided they are treated and looked upon as future officers. As further evidence, letters from ex-Pangbourne cadets at sea are constantly received at the College, the general tenor of which shows that they are able to apply practically what they have learned theoretically at Pangbourne, that they are assisted by their officers and that they have opportunities for keeping up their studies.

"With regard to the Board of Trade Examination for Second Mate, we have direct evidence from one of such companies that their failures for this examination are less than 1 per cent., while another records for 1922 27 passes out of 28 candidates. With regard to coaching for this examination, it is surely perfectly reasonable that candidates should attend a school for, say, a fortnight or three weeks in order to refresh their memory and to put them in touch with current questions. In our opinion your shipping correspondent has rendered excellent service by his article and at the same time has afforded us the opportunity of stating that there are steamship companies who do take a real interest in the training of the future officers of the Merchant Service. This training will be improved still further when it will be possible to run a sailing training-ship in conjunction with the College." I may say in regard to the last paragraph that, unfortunately, we have found it impossible



to run a sailing ship owing to financial reasons, but I hope that it will be taken up at some time or other.

MR. RICHARD BENYON : Mr. Chairman, Ladies and Gentlemen, I should like to make a few remarks with regard to the apprenticeship question as applicable to British ships at the present time. So far as the remarks are concerned which have been made more especially in reference to the cargo steamers, the picture to my mind has not been painted half black enough. I do not think there is any necessity for introducing a physical test when any lad is indentured as an apprentice to a cargo ship, for the simple reason that you can rely upon the owner and upon the marine superintendent to see that no "duds" are taken. There are many steamship companies, the big liner companies excepted, who regard the apprentice simply as a maritime labourer. From the time he starts his apprenticeship until he completes it he is simply a cleaner of brass work, an amateur painter, and a trimmer to shift coal from one hold to the other, and as for education or instruction he receives absolutely none. In many cases when a lad is in the third year of his apprenticeship he is a big able lad. He sees a common sailor, an A.B., in receipt of his £10 a month. The apprentice is doing the same work, but he is not getting the same pay, and, if the boy is not supplied by his parent or guardian with pocket money, I maintain that there is a very strong inducement to that boy to desert. Take the case of a lad with a four years' apprenticeship, a boy who has salt in his bones, who will go to sea, who likes adventure—not the bookish boy. He is neglected during the whole term of his apprenticeship. He comes to the Second Mate's examination. His mathematics are absolutely rusty; and, if you want to see one of the most pathetic sights in this country of ours, go to some of the nautical colleges and see the poor lads there who are going up session after session trying to master that elementary knowledge of mathematics which they must acquire before they can get their Second Mate's ticket. I think something must be done to remedy that state of affairs, although things are not as bad as they were. There is just one other point I would like to make and it is this—that if there is to be any true remedial solution of the apprenticeship question it must take the form of establishing some approximate equation between the number of apprentices that are engaged and the berths waiting for them when they have completed their period of service. Until that is done the British Mercantile Marine and more especially the apprenticeship side of it will labour under a very serious disadvantage. I will give one case in point. There is at the present time a young lad educated at a public school, as well dressed and as of nice an appearance as many of the gentlemen I see round me this afternoon, who has served his four years' apprenticeship and secured his Second Mate's ticket, and who was then told by his owners "There is nothing for you." He has since been to almost every marine superintendent in the Port of London only to be told in every case: "There is no vacancy." He has asked them: "Will you take my name and put it on the books?" and they have replied: "No, that is no use at all. It will be years before we can find a berth for the lads who have served their apprenticeships in our own ships." Now, I maintain that that is little short of a scandal, and those who have the welfare of the British Mercantile Marine at heart should do everything they possibly can to put that matter straight. It is no use going to the Board of Trade. The question was raised in the House of Commons only last week in connection with the education question, and the Member who asked the question was politely informed that if the parent or guardian had any grievance he should remember that the indentures were in the nature of a contract and therefore that the parent or guardian had a remedy, the suggestion of course being that the remedy was



the Law Courts. I would like once more to express my appreciation of Captain Day's paper and also my appreciation of the action of this Institution in doing such a good work in bringing this national, in fact I may say imperial, question before the public.

LIEUT.-COMMANDER ERIC B. TURTLE, R.N. : Mr. Chairman, Members of the Royal United Service Institution and Visitors, I want to make one preliminary remark, and that is that, although I have the honour of writing R.N. after my name now, that has not always been the case during the quarter of a century I have been at sea. The first half of that time I was in the Merchant Service, in fact I had 13 years' experience in it. I have never attended any of the inquiries to which Captain Day has referred, but I have often heard of them, and I understand they always ended up by a resolution in favour of higher pay. Naturally everyone wants to get higher pay, but that aim must be coupled with higher efficiency. Captain Day puts a higher physical standard before a higher educational one. On this point I differ from Captain Day because I do not think we shall ever get a higher state of efficiency unless we get a very much higher educational standard. Some of you who read the *Daily Mail*, may have seen an article in that paper referring to the shortage of officers in the German Merchant Service, and it was pointed out in the article that that state of things was due to the very high standard that was required. Compare that with what is happening at the present time in our own Merchant Service, where, I believe, there are something like 2,000 men holding certificates walking about unable to find ships. How can we remedy that? I maintain that we can remedy it by introducing a preliminary educational examination. I do not know of any other profession in which such a preliminary education is not required. The chemist who sells you a box of Beecham's Pills has to pass a very strict preliminary educational examination; the chartered accountant, the lawyer, the doctor, candidates for the Army and Navy and the Church, all have to pass an educational examination first, and I have never been able to understand why it was that the Merchant Service officer did not have to do the same, especially as he has to pass examinations which require certain educational ability. This is very needful now that the Board of Trade examinations are getting more difficult and so many more contrivances are being introduced in connection with the navigation of ships. Yesterday I was at what the last speaker referred to as one of our "nautical cram shops," and the instructor there told me that many candidates for the Board of Trade examinations are insufficiently grounded in mathematics. These young fellows come up to pass the Second Mate's examination and they have to learn half the work in a parrot sort of form. That seems to me a very great pity. I do not see why the preliminary education need be very difficult. For instance, the College of Preceptors or Oxford and Cambridge local examination (provided a boy passed before he went to sea), would, I think, meet the case, but it is of no use for him to be called upon to pass such an examination after he has spent four years at sea. I have often discussed this subject with people who have said: "What does an officer want to know Latin and French and similar subjects for?" When people talk like that they lose sight altogether of the idea of the necessity of a preliminary educational examination. The idea is to get a high standard for a profession, so that you will have ground prepared for further study. Another point that is raised against the entrance examination is that learning a foreign language is unnecessary, but in my opinion a language would be very useful to a man who is visiting other countries. At present a boy goes to sea at 15 just at the critical age of his education. A physical and an educational examination would have the effect of probably reducing the number of boys

very largely, but I do not think that would matter. I compare the systems that exist at present in the following way. The Pangbourne, the "Worcester," and the "Conway" systems are like a man who has a piece of land, who tills it and ploughs it and gets it ready for sowing, and then the land is left to receive whatever seed falls there by chance. The other system, the direct entry system, is far worse, it is like having a piece of land and not troubling to till it at all, but allowing it to grow weeds. One of the previous speakers mentioned the question of the instruction of apprentices. It has always seemed to me an extraordinary thing that an indenture should be signed to the effect that an apprentice should be instructed and yet that there should be no instruction given. That seems to me very much like signing on under false pretences. Some time ago the point was raised as to whether the question of stability should be introduced into the examinations. I recently read an account of a large cargo steamer that was lost in the Atlantic Ocean (and the statement was made that the company had lost £97,800) because the master pumped out his ballast tank and the ship turned over. He evidently did not know anything about stability, and I think that subject ought to be taught. Mathematics also ought to be taught. There is plenty to teach a boy instead of his cleaning brasswork and shovelling coal. There is one other point that I should like to refer to and that is recreation. You all know the old saying that "all work and no play makes Jack a dull boy." I consider that shipmasters should allow apprentices to go ashore occasionally when the ship is in port. It is essential that the physical standard, if introduced, should be kept up by exercise and recreation.

CAPTAIN COLIN NICHOLSON, R.N.R. (Mercantile Marine Service Association for Masters and Officers): Mr. Chairman and Gentlemen, I desire to say that in the main my Society is in full accord with what Captain Day has said. The "Conway" started in 1859, just 64 years ago, and I also believe they started the "Indefatigable." They hold the Cup for rowing, a subject connected with seafaring life. They also have a field of three acres, and I believe they run a very successful football team. That all goes to show that they certainly agree with what Captain Day has put forward with regard to the physical side of the men's training. Captain Day said something in his lecture about sail training. No doubt we all agree, especially we older men, with sail training in principle; but the difficulty is that you cannot very well put it into practice, as our friend from the Pangbourne mentioned just now. I think Captain Day is to be congratulated on the boldness of his remarks with regard to apprentices and the lack of training which they generally get. In other words, their indentures are not carried out. With regard to the question he raised of masters and officers, in cases of enquiry, being tried by their peers, I do not know whether Captain Day has anything in his mind in that particular matter, but I take it that the Board of Trade assessors are really their peers in that case. We must have judges and legal argument; we could not get along very well without them. I should be very glad if Captain Day has time in his reply to refer to Clause 5 of his conclusions, because at present it is not quite clear to me exactly what is meant by the words he has used.

CAPTAIN ERNEST C. SHANKLAND (Chief Harbour Master, River and Port of London): Mr. Chairman and Gentlemen, I desire to say that I am quite in accord with the remarks that Captain Day has made with perhaps a very few slight exceptions. It is surely very obvious that a sound physical training is essential for mental efficiency. With reference to the population supplied by the overseas trade, it must be remembered that in Queen Elizabeth's time we maintained in this country a population of 5,000,000, whereas to-day we have a population of

47,000,000. It is only, I think, about five weeks since the United States' Ships Subsidy Bill was talked out in the American House of Representatives. At the conclusion of the Great War the American people had only one thought with regard to the vast amount of tonnage left on their hands, and that was to make it a paying and equitable proposition. Lord Maclean and Lord Inchcape warned us that it would not work, that a ship must go where it is most needed on the most economical terms, and that it must be a race of the fit against the unfit. I submit that Captain Day's paper points this out particularly, and in his reference to sail training he draws the inference that the British race has been made more virile by its association with the sea, and we must not forget that fact.

MR. WILLIAM H. COOMBS (Joint Managing Director, The Navigators and General Insurance Co., Ltd.): Mr. Chairman, Ladies and Gentlemen, may I be permitted to make a few comments on the subject of Captain Selwyn Day's excellent paper. Perhaps my views, being those of a Master Mariner trained on H.M.S. "Conway," but without the benefit of subsequent experience in sail, may be of some small value. I am strongly of the opinion that the training of every officer should, if possible, include a short period in a sailing vessel. I naturally cannot say enough in favour of the "Conway," the training on that ship was never better than it is to-day, but I cannot but feel that she was intended to provide a preliminary training in discipline and technical subjects, as a preparation for a more strenuous apprenticeship in sail. Years ago an apprenticeship in sail was a foregone conclusion, but times have changed and the sailing ship is almost a thing of the past. I submit that something should and could be done to fill the gap. By the public-spirited action of a retired Master Mariner we now have in this country the old "Cutty Sark," a ship with a wonderful and valuable tradition. Could not this famous little vessel be used to advantage as a sea-training ship for senior "Conway" and "Worcester" cadets, giving them an insight into the ways of a ship under sail? It will be a surprise to many present to learn that it is possible, I do not say usual, for a boy to go to sea in steam nowadays and complete his so-called training without learning to sail a boat or pull an oar or work aloft efficiently. I do not blame the shipowner for this state of affairs, I blame the British public, who should by this time have learned to take an intelligent interest in the Service which saved the country from starvation. I think, perhaps, Captain Selwyn Day takes an excessively pessimistic view. We must not underestimate what, to my mind, is our greatest national asset—our sea tradition and sea instinct. Training is most important, but sea sense is all important. In conclusion I would say that I know that at the present time Merchant Service officers are keenly interested in the affairs of their profession. Captain Day mentioned his regret at the absence of a technical institution. I can say with authority that there is a stray movement on foot to found an Institution of Master Mariners—a purely technical body. Such a body would regard the problem of the training of its future members as a matter of paramount importance.

PAYMASTER-COMMANDER H. B. TUFFILL, C.B.E., R.D., R.N.R.: Mr. Chairman, Ladies and Gentlemen, we have all listened with much interest, and are, I am sure, very grateful to Captain Selwyn Day for his remarks in connection with this subject, and I think our thanks are due to him for bringing this subject forward so well. Captain Day has had pre-war training, and things have altered very considerably in many directions, and therefore we are faced with the urgent necessity of reorganising and establishing afresh the recruitment and training of our Mercantile Marine. Captain Day's statement that we are descending to a

lower standard in executive ability than Holland, Germany, Denmark or Japan is, I venture to think, very debatable. During the War the British Mercantile Marine was combed and recombed to get the more active men into the actual fighting Services—and those that were left did magnificently. The cargo ships were being run with greatly reduced executives—and many of the men were too old or too young, but in the working of the convoys the station keeping came as a complete surprise to officers and men of the Royal Navy concerned. In the boat work after disaster, which is usually accepted as the test of a real seaman, the work was wonderful. As to Captain Day's comparison. Before the War the German shipping was practically all liner shipping—and the same may be said of the Dutch. The liner training in this country was just as good as the liner training in Germany or Holland—and produced most certainly no worse results. As to the present position, I do venture to suggest that we must not overlook the fact that shipowners carry on their business on commercial lines, and moreover they are the servants of trade, so that if the trading community does not give them the goods or passengers to carry, they cannot adventure their ships, and consequently cannot employ officers and men, much as they would wish to do so, in bad, lean times, in the same numbers that they do in good prosperous times; hence the unemployment which we and they all deplore; and from this I think we can deduce much in support of Captain Day's ideas which might be summarised as to "the survival of the fittest." Competition for jobs is about the finest driving power in the world to get good service. Competition may be, and is, very hard on the individual who has misjudged his capabilities, but that has nothing to do with the results attained through competition. The shipowners make their living out of carrying the lives and property entrusted to their care *in safety*. A casualty is a business loss, and therefore they may be trusted to get an efficient executive. This subject may not concern the State much, but it does affect shipowners very much, and they are closely concerned with the State in the national industry of shipping. As Captain Day has told us, training ships have been established with great success, enabling boys to have a good grounding for their future career with an allowance off the regulation apprenticeship time. The White Star Line clipper "Mersey" may be taken as a pre-War example of the effort to provide the finest type of officer for present day requirements, by continuing the training of the young officer after leaving "Worcester" or "Conway," but unhappily this establishment was, by force of circumstances, closed down during the War. In connection with this establishment, which was similar to those foreign-owned training ships referred to by Captain Day, the Board of Trade issued special regulations whereby cadets who had four years' instruction (three years if they had served satisfactorily on the "Conway" or "Worcester" for two years previously) on an approved sea-going training ship, might sit for examination for a certificate as second mate, and, after obtaining this certificate and serving in vessels satisfying certain requirements, might be allowed to sit for examination for certificates as first mate and master. Continuation of service was thus provided for. Such vessels undoubtedly produced men who fully justified the necessity for such a scheme, and though the War has interfered with these schemes for the time being, it is to be hoped that shipowners, either individually or in combination in various ports, will take up this work on behalf of all concerned as a pride and duty by virtue of position, and that, in such new schemes as may be evolved, sailing ships will still be found, even though they be not a commercial proposition, as their advantages for such a purpose cannot be questioned.

In the event, however, of a special training of apprentices in sail being no longer practicable or limited in possibility, sympathetic help from their patron

in oversea commerce—the Board of Trade—must be forthcoming in the way of a revision of the rules with regard to boys, indentured in steam on liners, becoming assistant officers of the watch under senior and higher-graded men, to qualify for certificates as mate and master, which surely must be at least equal in the conditions prevailing on that type of vessel to having sole charge of the watch on small ships—with the advantage of continuous service in the same employ. In these days of big ocean-going ships, this question is, unhappily, a stumbling-block to the continuous service of cadets and junior officers with the big lines; I refer to the requirement of officers who have obtained the certificate of second officer being in *sole* charge of a watch, and if the Board of Trade can be persuaded to ease this requirement, it should undoubtedly prove of great help, and indeed an impetus to shipowners to establish training ships which can continue and follow on the valuable work that is done at Pangbourne, on "Worcester" and "Conway."

We are a maritime race, and with the Royal Navy reduced, it is all the more urgent that we see to it that our Mercantile Marine is on a sound basis, and gives the chance of a profession for the sons of gentlemen. We *are* the finest sea Power, let us have our finest blood to maintain the glorious tradition of the seas which is our heritage.

CAPTAIN A. C. COOKE, R.N.R. : Mr. Chairman and Gentlemen, first of all with regard to the *personnel* of the Mercantile Marine, in my opinion there is nothing wrong with the physical condition of the officers. I have known them for 55 years, and I have never noticed anything amiss with them through the men being physically unfit. Then, again, with regard to apprentices, apparently most of the speakers as well as Captain Day seem to think that, because a boy has been an apprentice, that necessarily he must become an officer. If that is the case we have got far too many apprentices because if each ship had two apprentices and no more there would be more commanding officers available than there would be vacancies for them through the older men falling out. I do not think the apprenticeship system was ever intended for the production of officers alone. I think it was for the general recruitment of the Merchant Service; and those boys who had been apprentices and showed special ability became officers. The rest of them from the nature of things must take inferior positions. A boy came to me within the last week asking for a job as a third mate. I asked him why he did not go to the firm with which he had served his time. He laughed at me. He said "What is the use of going there? I am one of a hundred boys that have served their time, passed their examinations and cannot get a berth." If you are going to consider that apprenticeship means the training of officers and nothing else, then some system should be adopted whereby the number of apprentices is strictly limited.

CAPTAIN C. E. IRVING, C.B., R.N.R. : Mr. Chairman, Ladies and Gentlemen, I endorse from my own experience a great number of the statements the lecturer has made, and I hope they will bear good fruit in the future. I happened in 1901 to have the honour of listening to a lecture by the late Lord Fisher at Admiralty House, Malta, and I remember he said: "One of the burning questions of the moment, as far as regards sea training, is the doing away with masts and sails in the Service. How are we to train our officers so as to give them confidence and reliability?" Lord Fisher, who was then Sir John Fisher, said: "We must, if necessary, put the men in the engine room or put them to shovel coal in the stokehold, but we must find something to take the place of masts and yards." From my own experience in the Merchant Service, which includes four years in the "Cutty Sark" and the command of some of the largest merchant ships going out of London,



I have never noticed anything that has taken the place of masts and yards. There is no doubt about it, as the captain of Pangbourne College mentioned just now, that until there is some sort of disaster we do not see anything in the Press about the Mercantile Marine. That was the case some time ago when there was a disaster and many lives were lost off Ushant. True, the captain was held to blame, but had that captain time to train his officers in between the ship leaving London and arriving off the position of the disaster, near Ushant, a matter of some 30 hours? In my opinion he had not time to train his officers, or opportunity to ascertain who were trained and who were untrained. The training should have been done in the days of apprenticeship.

CAPTAIN M. B. SAYER (H.M.S. "Worcester") : Mr. Chairman and Gentlemen, naturally being in command of one of our training ships I have listened to this lecture by my old friend Captain Day with great interest, and I am fully in accord with many of the remarks he has made. We all know that England has been dependent for her safety on her sea power, and always will be. That means efficiency at sea, and it means the efficiency of the ship officers. Captain Day and I and fellows of our age and generation are about the last of those who received their sea training in a sailing ship. I may say that last year there was only one sailing ship left England with a load, and I only know of one that is leaving this year. That means to say that our future officers are being trained in steamers. My own boys leave me after going through their two years' training, and I can tell you that it is a pretty hard training. There are not many minutes of the day that they are left to themselves; they are being stuffed the whole time in school work and in seamanship—not enough seamanship because the school work does not allow of it. In the old days the boys automatically picked up their seamanship in sailing ships. They could not help it; it was a life in itself, and that in particular made them strong and hardy. It seems to me that the present sea training in steamers requires a certain amount of improvement, and that it can only be improved in one way, and that is by organisation. I have asked many boys who have come to me after being for several voyages what their daily routine is, and I gather from them that there is no system of training after leaving the training ship. They are more or less very junior officers of the watch; they walk about on the bridge, perhaps with a telescope under their arm, and do a certain amount of signalling, but beyond that they receive very little training at all. Therefore I say that some system should be organised and laid down, and the various companies which carry apprentices should adopt the system whereby, during the 24 hours, a regular system of training should be carried out, so that at the end of three years' training an apprentice should be quite capable of going up to sit for his Board of Trade examination without having to go to a crammer. Captain Day's suggestion that there should be a representative on the Board of Trade and at the Admiralty, is to my mind, a very good one, as from that source organisation might be drawn up and set forth to the various people concerned.

THE CHAIRMAN (ADMIRAL SIR REGINALD TUPPER) : Ladies and Gentlemen, it is a great pleasure to me to be able to congratulate Captain Day on the very able paper he has laid before us. Co-operation between the Merchant Navy and the Royal Navy has always been a subject of great interest to me. Captain Day alludes to the White Ensign and the Red Ensign being alongside each other at the Cenotaph. They worked together during the War; they have worked together during all wars. From the time of Elizabeth, indeed from the time of King Alfred down to the present day the Merchant Navy and the Royal Navy have always

worked together, and I trust they always will. What we have to do at the present time is to endeavour to keep them together now in peace time. I look upon the Navy of the Empire as composed of three parts—the Royal Navy, the Merchant Navy and the Fishing Fleet; and it is our duty in the three different branches of our sea life to keep in touch with one another. The suggestion made by Captain Day in his lecture that there should be a representative from the Merchant Navy on the Board of Admiralty and a representative of the Board of Admiralty at the Board of Trade is a most excellent one from the point of view of keeping in touch with each other. With regard to the question of *personnel*, I agree with the principle of physical tests for fitness, but I hold still more radical opinions than Captain Day does. What I would like to see would be a constant interchange of duties between the officers and the men of the three branches of the sea forces so that we may all know what each other is doing. There is a small amount of that interchange now, and there was a certain amount of it before the War in the matter of Naval Reserve officers being embarked for training. That is, I am happy to say, being continued at the present day, but I should like it to go further. The *personnel* of the Royal Navy has now been reduced to 90,000 men, and the Board of Trade said that two years ago the Mercantile Navy was composed of about 280,000 officers and men, although I believe there were still 60,000 foreigners in it. I am one of those who think there ought not to be any foreigners in the British Merchant Navy; but, of course, there must be a few foreigners in it, because we have a lot of British ships which trade in foreign countries and those foreign countries insist on native seamen being embarked for the coasting trade; but, with that exception, I say that all British ships should be manned entirely by British officers and British seamen. It would, I believe, be possible to arrange to have an interchange of *personnel* if there were representatives of the different branches of the sea forces on the same Boards. For instance, if we could recruit our British Naval ratings to serve so many years in the Royal Navy and so many years in the Merchant Navy you would get a certain amount of interchange there. Of course, at the present time a few of the seamen at the end of their first engagement do go into the Merchant Navy and are employed as quartermasters, but it is not a very large proportion. In addition, a fair number of the men in the engine room departments who have served for some time in the Navy and have been educated in the Navy find their way into the Merchant Navy, but there is not a regular interchange of duties at present. I cannot help thinking that the principle adopted by one of the nations mentioned by the lecturer—Japan, I think it was—under which a certain number of merchant steamers are manned entirely by Royal Naval ratings is a good one, and I think it might be arranged between our shipping companies and the Admiralty that certain of their ships should be manned entirely by Royal Naval ratings. That would ensure our having a much larger Naval *personnel* without the cost of that particular part of the *personnel* coming on the Admiralty. The Admiralty ought to be very pleased to have something for nothing. Of course, it would not be entirely for nothing, because the Admiralty would probably pay part of the cost; but any way it seems to me in that way there would be a possibility of keeping touch between the three great branches of the sea life of the Empire. Another scheme is on foot I hear for bringing the officers of the Merchant Navy together by the formation of a Club in London, but until that scheme fructifies I do hope that officers of the Merchant Navy, of the R.N.V.R. and the R.N.R. who are eligible will become members of this Institution. They can become members for such a very small sum. They have a charming place to come to, where there is a beautiful library and all the newspapers, and they can write their letters here. I am afraid many officers do not understand the great advantages

which accrue to them by becoming members of this Institution. They also have the benefit of reading the JOURNAL when they are at sea, or when they cannot attend the lectures here. I do hope that all you gentlemen who are connected with the Merchant Navy will be so kind as to bring this Institution to the notice of the officers who are serving in your various companies, and try and get all those who belong to the R.N.R. and R.N.V.R. to join it. If the radical schemes that I have enunciated do not fructify—and I daresay they will not—if you will do *that*, at any rate those officers would have the advantage of being able to meet each other and old R.N. shipmates here; they will be able to read the great works on Naval History and the naval deeds of the Empire in the library upstairs. Thank you, very much, Ladies and Gentlemen, for your presence here to-day, and I also thank Captain Day very much for his lecture. I will now ask him to say a few words in reply to the various gentlemen who have spoken.

CAPTAIN S. M. DAY, in reply, said: Mr. Chairman and Gentlemen, they say that experts differ. I think this must be an exceptional occasion, for on the material suggestion that I made I think there has been general agreement. The goodwill of Admiral Sir Reginald Tupper is a cause for pride and encouragement to all of us in the Merchant Service. When such officers as the captains of the "Worcester" and the Pangbourne Nautical College, who are present here to-day, endorse the principal point raised in the lecture it really ought to convince anybody who may want to arrive at an unbiassed technical opinion. They have hundreds of boys under their immediate care. These boys are followed in their careers, and the results are known to them, more so than to any of us. I would far sooner that your opinion was influenced by what you have heard from those who have honoured me with their attendance this afternoon than by anything advanced by me. I do not want to put myself forward as someone specially inspired. I have been at sea for only 34 years. I have never been so much as two months at home at a time until last year, and therefore can only speak within the limits of my experience afloat. Captain Cooke, speaking with an experience of 55 years ago, had a different one. That is quite possible. That was more the sailing-ship era, since when many changes have necessarily occurred and our one point is to allow, however, no change to a lower standard of the executive *personnel*. Among other details raised in the discussion I have been asked for an explanation of what is meant by paragraph 5. I really think there is nothing for me to add to it. My whole idea was rather to draw out the opinions of others than to make any concrete suggestions other than that for a physical standard for future officers. I do not want to get in anybody's way. It is simply desired to draw attention to what is known amongst ourselves as an admitted and growing evil, and to hope that if there is anyone in authority who looks into these matters, and if the Press have decided to make an exception on this occasion and allow the Merchant Service a little more space, remembering that we are responsible at least for the carriage of their papers all over the world, it may eventually reach the ears of the Board of Trade, and they, by reading your opinions in the records of this Institution, may apply the only and obvious remedy. In that lies our one hope; although if a representative of the sea-going *personnel* was appointed to the Admiralty and to the Board of Trade, the subject could all the quicker arrive at those respective offices. I wish particularly to thank Mr. Benyon for what he said. A gentleman in his position is well qualified to study the general conditions of the sea service. Information reaches him from all sources and he has given us the benefit of that information. Mr. Coombs has been so long ashore that he has taken to some extent what you may call the landsman's view of the situation. In his reference

to our late enemies, I think that to quote these political crimes that were done during the war is useless now. If you make peace, I say make it with both hands. Do not shake with one hand and shake the other hand in the other fellow's face. But quite apart from what you think about that, the Germans in 1914 had got the largest and fastest sailing ships the world had ever seen. They were the only people who could make sailing ships pay, at that time, when they wanted to sail them. We must also remember that until our Government subsidised (in effect, the building of) the "Mauretania" and the "Lusitania," the Germans held the blue riband of the Atlantic with the "Deutschland" and the "Kaiser Wilhelm der Grosse." That shows their enterprise, or call it what you will. They were very serious competitors in being able to build those ships and in being able to run them so efficiently that they compelled us to counter-action. Last year I was in Bombay and other places, and I went on board German ships expecting to see the officers looking down and out and generally miserable, like people in a state of despair. But it was not so. I compared my experience with that of other men before I dared to take the liberty of putting anything on paper such as I have done in my lecture to-day. I have consulted innumerable people, particularly pilots and others with more experience than my own, and I find ourselves in common agreement. These German ships were clean. I went on board them. The captain had state rooms like a West End flat. The men were all decently dressed, and there was that discipline apparent for which German ships are noted, and were before the war—and Dutch ships also. It is for those reasons that we should regard them as very serious competitors. Let me say again, and in conclusion, that I feel highly honoured by your attention and criticisms, and much gratified if, now having drawn attention to it, you will improve on the one suggestion I have made.

CAPTAIN W. F. CABORNE: Ladies and Gentlemen, before we part I will ask you to pass a hearty vote of thanks to the First Lord of the Admiralty and to Admiral Sir Reginald Tupper respectively for presiding over the meeting this afternoon.

The resolution of thanks was carried by acclamation.

THE CHAIRMAN (ADMIRAL SIR REGINALD TUPPER): Captain Caborne, Ladies and Gentlemen, I beg to tender you hearty thanks for the kind way in which you have passed this resolution, and the Secretary will no doubt convey to the First Lord the hearty thanks that you have accorded to him. I think, perhaps, the most interesting points we have heard to-day related to the establishment of a Pension Fund for the Merchant Service and also continuous service for the Merchant seamen. That has nothing to do with officers' training except that it helps the officers to maintain discipline, which is always a difficulty in the Merchant Navy. Thank you, Ladies and Gentlemen, for your vote of thanks and I wish you a very pleasant journey home.

The meeting then terminated.

## ECONOMIC PRESSURE IN THE WAR OF 1739-48.

By C. ERNEST FAYLE.

IN a previous issue of this Journal, the present writer attempted to show, by reference to the war of 1739-48, that commercial considerations entered quite as largely into the war plans of the early eighteenth century as into those of to-day.<sup>1</sup> This fact in itself is suggestive as to the permanent importance of the economic element in war; but, before any definite deduction can be drawn from it, it is necessary to ascertain how far the attention paid by both sides to the attack and defence of trade was justified by the results achieved.

Before proceeding to any detailed examination of those results, it is necessary to emphasise one fundamental difference between the conditions in which trade was carried on in the eighteenth century and those of to-day. The transition from sail to steam has, of course, affected in many ways the problems of warfare against commerce; but in no respect has its influence been so revolutionary as in its effect on the character of the trade itself. By multiplying the number of voyages that can be made in a given time, by eliminating considerations of wind and weather, and by enabling the duration of a voyage to be fixed with certainty, steam has permitted the growth of great industrial populations, dependent alike for their daily bread and for the materials of their trade on a continuous stream of ocean traffic. The whole economic structure of a modern industrial community is based on the regularity, as well as on the volume, of the flow of trade, and even a temporary interruption may prove disastrous. The blocking of the main trade routes during the late war, for a period of two or three months, would inevitably have produced an acute food crisis in Great Britain, and to a less degree in France and Italy, and would have jeopardised the supply of munitions and war material to all the Allied armies.

In the eighteenth century the voyages were long and of uncertain duration, the season of sailing was dictated by wind and weather conditions, and ships sailed in large groups at wide intervals, rather than in a steady, daily stream. In these circumstances, trade was necessarily confined mainly to luxury or semi-luxury commodities and, though the financial importance of foreign commerce was very great, a delay of weeks, or even of months, in the arrival of cargoes was of far less importance than it is now.

Let us take one or two examples from the trades chiefly affected by the war. The East Indiamen went out one year and came back another. The West Indian sugar trade came home in two great convoys, one about June, with cargoes loaded before the end of the harvest, the other after

<sup>1</sup> "The Deflection of Strategy by Commerce in the Eighteenth Century," in the issue of May, 1923.



the hurricane season at the end of September. The triangular voyage to the Guinea coast for slaves, thence to the West Indies, and home with West Indian produce, occupied about fifteen months. The Spanish treasure fleets sailed at intervals of a year or more.

In between the sailing of these great mercantile fleets, intercourse was carried on by lesser convoys and by ships sailing independently—"runners" in the West Indian trade, Spanish "azogues" and "register ships"; but in the main, the long distance trades were carried on by great annual fleets. In the short sea trades, sailings were, of course, more frequent, but it is probable that only a very small proportion of the sea-going tonnage entered or cleared more than once in the year.<sup>1</sup>

The result was that delays which would be intolerable to-day amounted, at most, to an inconvenience. On 1st February, 1741, as a result of the shortage of men for the Navy, an embargo was laid on all shipping in English ports, and was not lifted till 14th April. In 1742 the House of Commons called attention to the fact that the Portugal trade had been detained, awaiting convoy, for nearly 12 months. In 1744, when French squadrons were at sea, unlocated, the Jamaica fleet, which was ready to sail in April, did not leave England till November.<sup>2</sup> Even in those days, such delays brought forth strong protests from the merchants and from Parliament; but the fact that they were not utterly ruinous affords a striking illustration of the extent to which modern conditions have increased the burden of trade defence.

On the other hand, this concentration of sailings, coupled with the limited power of dispersal possessed by sailing vessels, offered great opportunities to the attack. A single West Indian convoy normally counted from 80 to 150 sail; an outward bound combined convoy might comprise, before the trades separated, anything up to 250 vessels. Hence the possible effects of a single blow were far heavier, relatively to the total resources of the belligerents, than to-day.

It is worth noting that, even in those days, the merchants were apt to fret against the restraints imposed by convoy organisation. While the Admiralty desired to economise force by increasing the size and decreasing the frequency of convoys, the merchants, especially in the shorter trades, clamoured for more frequent sailings, so as to avoid the delays inseparable from awaiting the collection of a large fleet. In default of a prompt convoy, they were often prepared to take the risk of independent sailings. Moreover, the desire of an early market led many ships to break convoy and run for port, without attention to

<sup>1</sup> In 1701 the total tonnage of English ships in the foreign trade was estimated at 261,000 tons; the total clearances under the English flag amounted to about 274,000 (Chalmers, "An Estimate of the Comparative Strength of Great Britain," New Ed. 1804). The tables in Macpherson's "Annals of Commerce," Vol. IV., show that in 1790, English tonnage amounted to 1,345,000 tons, and the total tonnage of the Empire to 1,460,000. Entrances under the British flag at English ports were 1,196,000 and clearances 1,235,000 tons.

<sup>2</sup> Rear-Admiral H. W. Richmond, "The Navy in the War of 1739-48," I., 142-3, 187-8; II., 103.

orders. An Admiralty memorandum of 1741 contains bitter complaints as to the recklessness of merchants, attributed to the growing practice of insurance, and "desires that the trade should be brought under regulation as was practised in the late wars, when those concerned in the same branches of commerce advised together, and conformed to the rules agreed upon between them and the Government."<sup>1</sup> It is impossible to read this passage without reflecting how greatly the defence of trade was facilitated in 1714-18 by the strong and thorough organisation of the shipping industry and the close co-operation established between the Admiralty and the great shipowners' organisations.

Whether sailing with or without escort, most of the ships were armed, and many of them were quite capable of beating off the attack of the average privateer; but the Admiralty complained that the practice of insurance had rendered owners less careful to equip their ships for defence, and Sir Chaloner Ogle, when on the West Indies station, reported that even well-armed ships continually surrendered without firing a shot. The standard of public spirit in the early eighteenth century was low, and it is probable that many of the best and boldest officers and seamen of the mercantile marine were serving in our own privateers.

Many victims of the enemy's privateers must, however, have been small vessels, incapable of much resistance. With the great convoys, save for occasional stragglers, the privateers could not meddle; but in addition to snapping up "runners" and other ships sailing independently, they found a fruitful field of operations in the local traffic of the West Indies and along the British and New England coasts. Here they could never be entirely eradicated, and their ubiquity and success, even when the enemy's battle squadrons had been destroyed or masked, presents a remarkable analogy to the German submarine campaign. In the earlier stages of the struggle, much of their success was undoubtedly due to the inefficiency of the defensive measures adopted; but in 1747, when the war at sea was being conducted with energy and ability, no fewer than 25 French and Spanish privateers were captured in Home Waters alone, according to a list that is probably incomplete, and on 28th September of that year the Governor of New Jersey wrote that, from the Capes of Delaware to Sandy Hook, the coast was infested with these pests.<sup>2</sup> In 1748, the last year of the war, 64 French and Spanish privateers were captured in all theatres.<sup>3</sup> As in 1714-18 it proved impossible, even with a working command of the sea, to eliminate the losses due to sporadic attack.

It is probable, indeed, that the intensity of the attack on British

<sup>1</sup> Richmond, I., 182-6. The actual number of convoys, big and small, provided during the first 24 months of war was as follows:—

*Outwards*: Portugal, 14; Mediterranean, 11; West Indies, 6; North America,

*Homewards*: Portugal, 21; Mediterranean, 10; West Indies, 11; North America, 3.

<sup>2</sup> Richmond, III., 115-6, 273.

<sup>3</sup> Beatson, "Naval and Military Memoirs," I., 413.

commerce increased rather than diminished as the war went on. The complaints of the merchants in 1740-42 led to the adoption of greatly improved defensive measures in the following years, and after the re-establishment of a strong Western Squadron, British commerce was freed from such delays as that to the Jamaica fleet in 1744; but the very success of our own attack on French and Spanish trade served to increase the number of vessels taking out letters of marque, and our actual losses, so far as numbers are concerned, showed little, if any, diminution during the last two years of the war. What percentage these losses bore to the total volume of trade it is impossible to estimate with any approach to accuracy. The returns of losses and captures do not show the tonnage, and as the registration of shipping had not yet become compulsory, there is no satisfactory basis for comparison either as regards tonnage or numbers. The best basis available is that afforded by the returns of ships cleared outwards under the British flag. These amounted, in 1747, to nearly 495,000 tons. The average size of all vessels in the foreign trade in the eighteenth century was about 125 tons,<sup>1</sup> and as the greater number of ships only cleared once in a year, this would give a total of somewhere about 3,000 vessels. On this basis, the losses of that year, 551, would amount to over 18 per cent. It is certain, however, that these losses must have included a considerable number of coasters and colonial craft, the exclusion of which would greatly bring down the percentage. Whatever the losses were, they were fully made good by prizes taken from the enemy, and for the three years following the war the clearances of British shipping were over 20 per cent. greater than for the three years that preceded it, giving clear evidence of a net gain of tonnage.

It is, however, not by the percentage of losses, but by the volume of traffic that comes forward safely, that the success of either the attack or the defence of trade must be judged, and the returns both of tonnage cleared and of imports and exports show, convincingly, that the interruption of English trade was comparatively small. For the three years 1736-8 the shipping cleared outwards averaged 504,000 tons, of which 477,000 was English. By 1744 these figures had been reduced to 447,000 and 374,000 respectively; but in 1747 they rose to 496,000 and 395,000. Imports, before the war, amounted to about £7,500,000; the lowest point to which they fell was £6,200,000 in 1746; in 1748 they exceeded £8,000,000. Exports (including foreign coin and bullion) fell from about £12,000,000 before the war to a minimum of £8,870,000 in 1740; but in no subsequent year were they below £10,000,000, and for the last five war years they averaged about £11,500,000. Turning to individual countries, the figures of trade with Holland, Germany, Russia, and North America show very little sign of being influenced by the war. Those for Italy and Portugal bear marks of the disturbance created by

<sup>1</sup> Calculated from tables in Macpherson. Levasseur, "Histoire du Commerce de la France," gives the average tonnage of ships in the French West Indian trade as 100 to 150 tons.

the outbreak of war, and afterwards by the French intervention; but, on the whole, trade seems to have been well maintained. Both the total value of imports from the West Indies and the actual quantities of sugar shipped show a sharp decline at the beginning of the war, and again after France had come in; but by the end of the war the figures had gone up again to the normal or above. Thus, there is no reason, whatever figures be taken, to dispute Admiral Richmond's dictum: "British trade continued, its losses a fraction only of the whole body."<sup>1</sup>

It was this steady flow of trade that enabled England not only to bear her own expenses of the war, but to sustain the armies of the Alliance. Austria, Sardinia, Poland, the German princes, and finally Russia alike looked to England for financial assistance. In 1745 the Austrian, Sardinian and Polish subsidies amounted together to £800,000 and by 1748 the total, including money voted for the Hanoverian troops, was very nearly £1,750,000, about one-sixth of the total money voted for the year. Moreover, heavy as was the cost of the war, and great as was the alarm excited by the addition of some £27,000,000 to the national debt, the financial and economic stability of the country was so little affected that, during the few years of peace that intervened before the beginning of the Seven Years' War, the trade of the country showed a remarkable expansion, and the Government were able to effect a large saving on the debt charges, by an agreed reduction in the rate of interest.

When we turn from the attack to the defence of commerce we have less ample and definite material to go upon; but a careful examination of such material as we have will enable us to trace the broad outline of events. From the declaration of war in October, 1739, to March, 1744, we were face to face with Spain alone. The war against Spanish commerce partook largely of the nature of territorial attack. The main object of the attacks on Porto Bello, Cartagena, Chagres, and La Guayra was to paralyse the Spanish colonial trade by the capture or destruction of its terminal ports; their justification lay in the preponderant part played by the treasure fleets in Spanish finance. Had the execution of the programme been as sound as its conception, the effect would probably have been decisive. The attack on Cartagena was watched with agonised anxiety by both the Spanish and the French Governments, and the successful defence of the port, wrote M. de Chavigny to Marshal Belleisle, changed the whole outlook in two worlds.<sup>2</sup> As it was, much damage was inflicted, the homeward bound trade, including the treasure fleet, was seriously held up; but no decisive results were obtained.

<sup>1</sup> For trade statistics, see Chalmers' "Estimate," Sir Charles Whitworth's "The State of the Trade of Great Britain in its Imports and Exports," 1776, and Bryan Edwards's "History of the West Indies." The official values of imports and exports are notoriously unreliable, but form a sufficient basis for the comparison of different periods. Both imports and exports for the years 1744-48 include prize goods to an average of about £400,000.

<sup>2</sup> See M. Sautai, "Préliminaires de la Guerre de la Succession d'Autriche," I., 360-4.



From March, 1743, when France came into the war, to the end of 1746, the navy had its hands full in frustrating plans of invasion, protecting our own trade, and supporting the Allied armies in Italy. Handled with no great vigour or strategical insight, it was nevertheless able, as we have seen, to preserve our own commerce from serious interruption. Both French and Spanish ships too, were taken in large numbers, and more than one branch of French commerce suffered from the capture of Louisbourg; but there was little serious interference with the sailing of the treasure fleets, and the great French West Indian convoys usually got through without much trouble.

Meanwhile the French fleet was becoming more and more tied to a passive defence of the convoys, in the safety of which the King had a direct pecuniary interest,<sup>1</sup> and when, in 1747, a new life was breathed into British strategy, the defect of the French dispositions exposed them to two heavy defeats; their losses were too serious for them either to attempt a belated offensive or to continue to furnish escorts on the old scale. The influence of the Western squadron is clearly seen in our own trade figures for 1747 and 1748; were similar figures available on the French side, they would present an instructive contrast.

Unfortunately, France was not yet a fiscal unit, and no reliable trade returns exist. Such estimates as that subsequently made by Arnould are largely guesswork, and as Arnould lumps the years 1740-48 together, he gives no help in tracing fluctuations caused by the war.

We must, therefore, do the best we can, by piecing together the evidence available, to form our own estimate of the effect of the attack. Let us take first the actual captures of shipping. The Lloyd's lists for this period are unfortunately burnt, but Admiral Richmond quotes from Macpherson's "Annals of Commerce" figures showing that the number of prizes taken from France and Spain exceeded our own losses by 196 vessels. Assuming the losses and captures to be approximately equally divided between the two Allies, and quoting a State Paper of 1738 to show that the merchant fleet of France consisted of "not above 800 sail of all sizes," he estimates the net French loss at about one-eighth of their mercantile marine. In this calculation there are several errors. Macpherson's figures are taken from Beatson, and a reference to Beatson shows that the losses were far from equally divided. By his totals the Spaniards captured from Great Britain 111 more ships than they lost; the French sustained a net loss of 307.<sup>2</sup>

<sup>1</sup> See May issue, p. 288.

<sup>2</sup> Beatson, "Naval and Military Memoirs," I, 414. His figures are:—

Taken from Spaniards, 1,249; from French, 2,185 = 3,434.

Taken by Spaniards 1,360; by French 1,878 = 3,238.

These totals do not, however, agree with his figures of annual losses, an addition of which gives:—

Taken from Spaniards, 1,288; from French, 2,187 = 3,475.

Taken by Spaniards, 1,460; by French, 1,858 = 3,318.

These figures include men-of-war as well as merchantmen. The French losses for 1747 are exclusive of 50 "barks" captured or destroyed.



With regard to the total French mercantile marine, the estimate quoted appears to be considerably short of the mark, even if it is confined to foreign-going ships. In or about 1730 France had a total of 5,364 vessels, inclusive of coasters and fishing craft. Of these about 1,500 were engaged in the chief foreign trades; 600 trading to the West Indies, over 700 to Italy and the Levant, and 200 to Spain and Portugal.<sup>1</sup> French commerce at this period was rapidly expanding, and at the outbreak of the war the West Indian trade is said by M. Sautai to have employed 700 or 800 sail. The total number of "vaisseaux marchands" in 1740 has been estimated at 1,800, which, assuming the figure to apply only to foreign going vessels, agrees very well with the earlier estimate.<sup>2</sup>

On these figures the net French loss, assuming that all prizes were engaged in foreign trade, might amount to about 17 per cent. It is probable, however, that many of the French prizes, especially among those captured in the Mediterranean, and the smaller privateers, were of the coasting type, and it is really impossible to say how far the number of foreign-going ships under the French flag was actually reduced, especially as some allowance must be made for new construction.

Mere numbers, in any event, are almost worthless as a criterion of losses. In Beatson's tables the 70-ton coaster counts for as much as the 700-ton East Indiaman. Such information as he gives with regard to the tonnage and value of particular prizes or groups of prizes, points to the conclusion that both French and Spanish commerce suffered far more severely than our own. No big British convoy was cut up, and a large proportion of the prizes taken by enemy privateers in the Channel, in the West Indies, and on the New England coast must have been small and unimportant vessels. On the other hand, a considerable proportion of the prizes taken from the enemy were large and valuable ships.

The Spanish colonial trade was carried on mainly by large vessels. Our attempts to intercept the treasure fleets were unsuccessful; but the "register ships"—vessels specially licensed to carry goods to any part of the Spanish dominions—were big ships for their day, and often carried cargoes of great value both out and home. While the average size of foreign-going ships was between 100 and 150 tons, and a ship and cargo worth £10,000 or £12,000 seems to have been regarded as a rich prize, the majority of the register ships captured in the course of the war ranged from 300 to 650 tons, and many of them carried cargoes worth £100,000 to £300,000. In 1746 ten register ships were taken, and the aggregate value of three of these, as given by Beatson, was £550,000.

The French East India and South Sea ships were also rich prizes. Many of these are mentioned in the list of captures given by Beatson, and the majority of those taken were vessels of 500 or 600 tons. The values of the East Indiamen ranged up to £300,000, and the cargo of one South Sea ship belonging to St. Malo was estimated at £600,000.

<sup>1</sup> Lavissee, "Histoire de France," Vol. VIII., Part II., by H. Carré, p. 106.

<sup>2</sup> Levasseur, "Histoire des Classes ouvrières et de l'Industrie en France avant 1789," Vol. II., p. 348.

In the West Indian trade, also, the French lost many ships of good size, especially in the successful attacks made, in 1747, on the great convoys. The average tonnage of 48 vessels captured from De la Motte's convoy works out at 334 tons, and no fewer than 18 of them were of 300 tons and upwards.

Unfortunately, it is only for the last year of the war that Beatson gives even a partial classification of the prizes as a whole. Of 98 Spanish vessels taken in 1748, 20 were privateers; but no fewer than 30 were register ships. Of 471 French prizes, 44 were privateers, 3 East India ships, 61 Turkey ships, and 146 ships from the West Indies. On the whole it is clear that, especially in the latter years of the war, the prizes taken included a large proportion of the more important vessels, and, making all allowance for some exaggeration by Beatson as to the value of individual prizes, his final estimate that there was a balance of £2,000,000 in favour of Great Britain does not appear to be excessive.

When we pass from a comparison of losses to an examination of the flow of trade, we are hampered at every turn by the lack of reliable figures. Such evidence as we have relates mainly to the colonial traffic, which was then regarded as of paramount importance both to France and England. The statistics show that about 60 per cent. of both the import and export trade of England in 1738 was carried on with countries in Europe, and Arnould's estimate suggests that much the same was true of French commerce. It is unquestionable, however, that, to both countries, the colonial trade was of peculiar value by reason of its monopoly character. It contributed largely to the customs revenue; it provided shipping under the national flag with secure employment and large freight earnings; it was extremely profitable to the merchants; and colonial produce, whether in the form of re-exports or as a basis for manufactures, played an important part in the European trade. Moreover, the colonial trade itself was steadily and rapidly expanding.

French trade with countries in Europe, so far as it was not carried on over the land frontiers, seems to have been largely dependent on foreign shipping, and, this being so, it is doubtful whether it was subjected to much effective interference; for in no respect is the comparison with 1914-18 more interesting than with regard to the restriction of enemy trade in neutral bottoms. It is the fashion to-day to talk as though "juridical niceties" and politic regard for neutral interests were alike modern inventions, and to look back to the eighteenth century as a happy time when the hands of the fleet were really free. The history of the war of 1739-48 makes short work of this theory. Whatever our contentions with regard to belligerent rights—and they were as yet vaguely enough defined—our actual powers were limited both by specific treaties and by political considerations. It is, indeed, extraordinarily instructive to look back and see commanders and diplomatists struggling with exactly the same kind of difficulties as those with which we were confronted in the first two years of the Great War.

By far the most important neutral, from this point of view, was

Holland.<sup>1</sup> The theory that the Navigation Acts had struck a death-blow to Dutch prosperity is now universally exploded. The exclusion of Dutch shipping from the Plantation trade had only accentuated the keenness of Dutch competition in other branches of commerce, and, so late as 1776, Adam Smith could write that the carrying trade of the Dutch was much greater than that of any other nation.<sup>2</sup> In particular they had almost a monopoly of the Baltic trade, the main source for the supply of naval stores. Their position resembled that of Norway, or indeed of Great Britain to-day, in that their mercantile marine was far larger than sufficed for the carriage of their own imports, and their surplus tonnage was always restlessly seeking for employment. It was, of course, at the ready service of the French.

Unfortunately it was in dealing with Holland that our hands were most tied. To Holland, with her great carrying trade, the restriction of belligerent rights was a cardinal article of political faith, as it became to many in the peaceful Britain of the nineteenth century, and by the Treaty of 1674, it was mutually provided that all goods, other than contraband, should be free in time of war, except when entering places "besieged, environed or invested—in French *bloquées* or *investées*." Thus everything turned on the definition of contraband, and even after experience of the Declaration of London, it may come as a surprise to learn that not only provisions and cotton, but hemp, flax, pitch, ropes, sails, anchors, masts, planks, boards, beams and all other shipbuilding material were placed specifically on the free list of 1674.<sup>3</sup>

The effect of this was serious, especially in the West Indies. So long as Dutch ships were free to pour foodstuffs and naval stores into the French Islands, their reduction by starvation was impossible, and they retained their power to equip privateers and to refit alike naval squadrons and homeward bound merchantmen. In 1746 Commodore Lee declared Martinique and the adjacent islands blockaded; but so long as the enemy's privateers could slip in and out, the Dutch Governor of St. Eustatius refused to regard the islands as "*bloquées*" or "*investées*," and to bar entirely the entrance and egress of these handy craft was long beyond the power of our West Indian squadrons.<sup>4</sup>

The same trouble arose in the Mediterranean, where Dutch traders were carrying provisions and naval stores into Marseilles and Toulon, thus assisting to maintain both the Toulon Squadron and the Franco-Spanish army in Northern Italy. There, in 1747, Admiral Medley seized everything on which he could lay his hands, under cover of the clause relating to places "*bloquées*" or "*investées*"; but the technical effectiveness of the blockade being more than doubtful, he refrained from bringing the ships into the Prize Court, and bought the cargoes himself for the service of the fleet and army. This was a most interesting

<sup>1</sup> Up to 1747, Holland took no part in the war, except as an auxiliary.

<sup>2</sup> "Wealth of Nations," Book IV., c. 2.

<sup>3</sup> Richmond, III., 51n, 168n.

<sup>4</sup> Richmond, III., 51, 75-7, 149-50.

anticipation of the action frequently taken in 1914-15 with regard to shipments which it was legally impossible, or politically undesirable, to bring into Court.<sup>1</sup>

It was not only Dutch vessels, however, that were engaged in the supply of the Franco-Spanish forces in the Italian theatre. Neapolitan vessels were running supplies under cover of false bills of lading made out to merchants at Lisbon and elsewhere—another anticipation of recent experience—and Tuscan ships were busy carrying corn to Marseilles. The seizure of these Tuscan vessels provoked a particularly impudent protest from our Ally the Emperor, who, as Grand Duke of Tuscany, objected to this interference with the "legitimate" trade of his subjects.<sup>2</sup>

For the Levant and colonial trades, however, France was dependent mainly, if not entirely, on her own shipping, and these trades suffered heavily. The Levant trade, indeed, was never effectively stopped. The British Mediterranean squadrons were always too short of small craft, and too much occupied with looking after the squadrons in Toulon and Cartagena and with supporting the Allied armies in Italy, to undertake a commercial blockade of Marseilles, or engage in systematic cruising. Nevertheless, Admiral Richmond seems to go too far in saying that the commerce of the Levant was "little interrupted." It was in the Mediterranean that some of the most active of the British privateers were at work. Captain Fortunatus Wright alone made 16 prizes in the Levant during 1746, and, as we have seen, there were no fewer than 61 Turkey ships among the prizes of 1748.

With regard to the long-distance trades, we are on firmer ground. One of these, the great Canadian fishing industry, worth, according to Macpherson, £980,000 a year, was totally destroyed by the capture of Louisbourg in 1745, and the fall of this place was also a heavy blow to the rich East Indian traffic, for which it was the homeward port of call. In 1747 the British West Indian Squadron established a nearly effective blockade of Martinique, the alternative port, and Admiral Griffin blockaded Pondicherry and the Coromandel coast. It was not, Admiral Richmond thinks, until this year, that the effect of sea pressure on the East Indian trade was severely felt; but this seems to be almost too cautious a conclusion. In 1745, Commodore Barnett took three ships of about 700 tons each, with rich cargoes of tea, porcelain, and silk from China, and five other East Indiamen were captured, during the same year, off Louisbourg or in home waters. Voltaire estimated the total value of the cargoes lost in this year alone at 25 million livres. Moreover, the operations of La Bourdonnais had cost the Compagnie des Indes 5 million livres, and as his force was formed by taking up and arming the Company's ships, his temporary success had been won at the cost of severe interruption to trade. That the war, as a whole, was disastrous to the Company there can be no doubt. Starting the war with a fleet

<sup>1</sup> Richmond, III., 168-9; Fayle, "Seaborne Trade," I., 294, II., 153.

<sup>2</sup> Richmond, III., 168-9, 175.



of about 30 ships, they lost 29 by capture or wreck. In 1744 and 1745 they passed their dividends, and their shares, which stood in 1740 at 2,316 livres, had fallen by the end of the war to 1,348.<sup>1</sup>

As to the West Indian trade, round which so large a part of the struggle at sea had raged, it had continued to be carried on with fair regularity until the end of 1746. It had, indeed, suffered serious interruption and heavy losses, which reacted on other branches of French commerce. In 1744, shortly after the outbreak of war, the Intendant Tourny wrote from Bordeaux to the Controller General that, for the last month, foreign agents had ceased to buy. Merchants "ne savent pas faire, faire avec sûreté par leur bâtiments le voyage d'Amérique De là plus de débit de vin."<sup>2</sup> On several occasions the whole trade of Martinique or San Domingo was held up for months by the British cruisers, as many as 150 or 200 ships lying idle at the anchorages. In 1745, too, the report of a British squadron cruising in the bay held up the outwards trade until it was too late to reach the West Indies before the hurricane season. Many prizes were taken—in 1746 Townsend took or destroyed over 30 sail out of a single Martinique convoy; but in the main the big French convoys, with their strong escorts, passed out and in successfully.<sup>3</sup>

The establishment of a strong Western Squadron and the victories of Anson and Hawke put a wholly new complexion on the situation. From De la Motte's homeward bound convoy, Fox captured 48 ships; of De l'Étanduère's convoy, five San Domingo ships were captured in home waters shortly after Hawke had crushed the escort, and more than 40 of the Martinique ships were captured on their arrival in the West Indies. In the following year, as we have seen, the prizes included 146 West Indian ships, and the total losses during the war must have amounted to a very considerable proportion of the ships in the trade.

This, however, was not all. After the victories of Anson and Hawke, no further big West Indian convoys put to sea, and the blockade of the French Islands themselves became very strict. Indeed, by 1748 not only the West Indian but all French and Spanish commerce seems to have come to a great extent to a standstill. Insurance rates went up to 30 or 35 per cent. for ships without escort, and very little less for ships in convoy.<sup>4</sup> So dangerous had trade become that merchants would no longer run the risk. Mostyn, cruising in the bay, saw "but one insignificant vessel of the enemies" during ten weeks. Warren, on the Canaries station, saw hardly a single Spanish ship in a month's cruise.

To judge of the actual effect of all this, we must look at the terms of

<sup>1</sup> The par value was 2,000. See Lavissee, *op. cit.*, VIII., 108-9, 349; Levasseur, "Histoire du Commerce de la France," Vol. I., 474, 476-7.

<sup>2</sup> Levasseur, "Histoire du Commerce," p. 455.

<sup>3</sup> Richmond, II., 152, 195, 196, 228-9; III., 59.

<sup>4</sup> It is interesting to note that Beatson considers the effect of the Act prohibiting British underwriters from insuring French ships to have strongly influenced the French towards peace.



peace in the light of the situation on land. The peace was admittedly inconclusive and unsatisfactory; but it was far more favourable than the Allies, other than Great Britain, had any right to look for. To quote Admiral Richmond: "The French had captured the whole of Flanders; Dutch Brabant and the great fortress of Bergen-op-Zoom were in their hands, Maastricht was threatened, and there appeared every possibility that a new campaign would place them in occupation of a considerable part of the United Provinces. The Allies had been repelled in their invasion of Provence, and they were on the defensive in Italy." France was demanding the cession of Tuscany, and British statesmen anticipated that she would ask for some part of the Barrier and Luxembourg.

The abandonment by France both of her claims and her conquests was purchased, it is true, by the restoration of Cape Breton; but in view of the commanding position she occupied in Europe, it is impossible to believe that she would have accepted so unfavourable an exchange had she been able to continue the war. That she was willing to renounce her claims can be attributed only to two influences—fear for her Colonial possessions and economic distress.

The situation of her colonies was, indeed, precarious. Canada, the West Indies, and the settlements in India all lay open to attack. Boscawen had already gone out to India with a force greatly superior to anything the French could put against him, and the effects of his expedition were widely expected to be absolutely fatal to French credit. This situation was due in large measure to the faulty strategy imposed on the French fleet by excessive preoccupation with a passive defence of commerce. It was the system that tied down ships of the line to escort work which prevented any real combination of the French and Spanish fleets and paralysed them for offensive action.

Even if Great Britain was unable or unwilling to provide troops for oversea attack, the French West Indian Islands, which a memorandum of 1733 declared to be more valuable to France than the mines of Peru to Spain,<sup>1</sup> must be given up as lost. Despite the entrance of occasional blockade runners, their supplies were now so reduced that, had not peace come when it did, they must have surrendered for sheer lack of food.<sup>2</sup>

The dominant factor, however, was the situation of France herself. Even before her entry into the war her economic position had been critical. Although commerce was flourishing and large profits were being made by the mercantile and manufacturing classes, the condition of the people was terrible. A succession of bad harvests, combined with the exhaustion arising from the wars of Louis XIV., and a system of taxation alike unsound and oppressive, had brought a large proportion of the peasantry to the verge of starvation, while manufacturers of silk, woollen,

<sup>1</sup> Lavissee, VIII., 109.

<sup>2</sup> Richmond, III., 244, quoting Caylus to Maurepas, 7 January, 1748. In 1742 the French Islands produced nearly twice as much sugar as the British. (See Macpherson, III., 262-3.)

and linen were hard put to it to obtain the raw material of their industries. But though the war was not originally responsible for the misery that existed in 1748, it aggravated it and prevented its relief. The losses of French trade and its more or less complete breakdown in 1747 and 1748, especially as regards the valuable entrepôt trade in colonial produce, had produced a disastrous effect on the capacity to import foodstuffs and materials to make good the deficit. If the war had continued another year, said Lord Bathurst, the French must "like the people of Egypt to Pharaoh, have sold themselves to us for bread." What probably weighed more with the Government than the distress of the people was that the dislocation of trade and industry had been disastrous in its effects on French finances. New taxes and imposts had been multiplied without much result, except to increase the unpopularity of the war and the Government, and, with such important sources of financial strength as the East and West Indian trade and the Canadian fisheries now wholly or in great part cut off, it was extremely doubtful how long France could continue to pay and support her armies.<sup>1</sup>

In any attempt to appreciate the effect of economic pressure during the war, it is necessary to bear in mind that not until the last two years was the strength of Great Britain at sea used effectively, and that the discontent arising from the early failures at sea, the continued want of success on land, and the heavy cost of the war, led the British Government to acquiesce in an indecisive peace just when the pressure on France had become really serious. Had Great Britain from the first concentrated to a greater extent and with greater vigour on the war at sea, had the British Government hardened its heart in 1748 to another year of war, the influence of the financial factor would have stood out with greater clearness. Even as it is, there is ample evidence both of the importance attached by both sides to the attack and defence of commerce, and of the influence of such operations on the war as a whole. The detail in which these operations have been recorded by Admiral Richmond brings out in striking fashion the manner in which the teachings of the recent struggle were anticipated in the eighteenth century—the weakness alike of passive defence and of sporadic attack, the overwhelming pressure that can be brought to bear by sea power rightly employed.

<sup>1</sup> Richmond, III., 236-42, 246-7; Lavissee, *op. cit.*; Cambridge Modern History, VI., 249; Parliamentary History, XIV., 431, 670.

## THE PASSAGE OF THE TIGRIS AT SHUMRAN, 23rd FEBRUARY, 1917.

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*Reference Sketch-maps at End.*

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1. *Introduction.*—Schellendorf, on page 413, says: "To cross a river by throwing a bridge over it, under fire, is certainly one of the most desperate undertakings that a General could be called upon to execute."

As far as large rivers go, the passage of the Tigris at Shumran, on 23rd February 1917, was one of the few occasions in the Great War on which the British Army was faced with the problem. The crossing should further be of interest as it was the crux of Sir Stanley Maude's operations which led to the recapture of Kut and the occupation of Baghdad.

2. *General Situation.*—At the beginning of December, 1916, the situation was as follows:—

The 1st Corps, under General Cobbe, was facing the Sannaiyat position, with the Meerut Division on the left bank and the Lahore Division on the right.

The 3rd Corps, under General Marshall, was holding the Sinn position from Magasis to Dujailah with the 14th Indian Division and the 13th British Division.

A Cavalry Division of two brigades, under General Crocker, was at Arab Village.

Shaikh Saad was the advanced base and a 2 ft. 6 in. railway ran out from there to Sinn.

There was a bridge of country boats at Shaikh Saad and two pontoon bridges at Arab Village, where there was also a mobile bridging train which had just been formed.

The Turks held Sannaiyat, the left bank of the Tigris to Kut, and a bridgehead round the mouth of the Hai. They also held the line of the Hai by posts and Arab irregulars. Their advanced base was at Shumran, where they had a bridge of country boats. They also had one over the Hai. Their total numbers were estimated at 20,000, with 70 guns.

The peculiar strength of the Sannaiyat position is too well known to need remark. The Tigris varied in width from 200 to 800 yards and was 50 feet deep in places.

3. *Maude's Plan.*—Maude was a great man for mystifying and misleading, and he was determined to see how much he could accomplish by surprise. His idea was to appear to intend to attack Sannaiyat

once again, and then to make a surprise night march and seize the Hai; he then intended to try his luck with a surprise crossing of the Tigris.

It was, consequently, of vital importance to keep the formation of a mobile bridging train a complete secret. The steps taken to do this were effectual, but added considerably to the difficulties of the new unit, which had no opportunity of practising. All the transport, too, did not arrive in time, and some of the pontoons had to be carried on G.S. wagons; this was not an easy problem to solve for a night march across country, and the final result cannot be called satisfactory.

4. *Seizure of the Hai.*—The night December 13th/14th was fixed for the night march to the Hai. On December 12th considerable artillery activity was developed on the Sannaiyat front, and one of the two bridges from Arab Village was moved up to Sandy Ridge to further distract attention in that direction.

The Hai was seized without any opposition, and, much to the disgust of the newly formed and enthusiastic bridging train, was found to consist of a succession of dry crossings and pools. However, the going was heavy for wheels, and a pool large enough and deep enough to float pontoons was found at Atab and two bridges built. Unfortunately it was also deep enough to engulf a messcart, which went over the edge.

5. *Attempted crossing.*—During the next few days our position on the Hai was consolidated, the cavalry reconnoitred the country and river ahead, and the railway was continued to the Hai.

Eventually, in the early hours of 20th December, the cavalry Division moved out, accompanied by one Infantry Brigade and the bridging train, and made a night march across country to the Brick Kilns. This place had been previously reconnoitred, but the only information as to the width of the river was that it was "300 cubits." The night march passed off without incident, beyond the breaking down of three or four wagons on the rough ground.

On arrival at the site it was found that the Turks were expecting us, presumably as a result of the previous reconnaissance, and had a small force with machine guns and a couple of guns on the other bank. However, it was decided to push on.

The country was like the rest of Mesopotamia—absolutely flat on both banks; the only cover consisted of the usual low bund or bank near the river's edge. However, at the point selected, a wide and deep, but dry, irrigation canal led up to within 50 yards of the river, where it was closed by a large dam. A section of the bridging train was sent up this canal, which afforded complete cover from view and useful cover against fire. A pontoon was got into the river, but before it could leave the bank casualties were so heavy that orders were given for the attempt to be abandoned. The one pontoon was lost.

All this time a flanking squadron were quietly watering their horses about a mile upstream, and preparations to make another attempt at this point were in hand, when orders were received by wireless from G.H.Q. to give up the attempt altogether and return to the Hai. The

complete chaos of the bivouac that night in the middle of the desert on the way back will long be remembered by those present; the majority of the animals had not watered since the previous day and got none till the next.

The attempt had apparently been a dismal failure, but actually it was a blessing in disguise, and contributed in a very large degree to the success of the final effort. It confirmed the Turks in their belief that a crossing was impossible and also gave them false notions of what would be done if any further attempt were made; this will be seen later. It also gave us a very good idea of what not to do, and of what extensive preparations were necessary. We profited by the experience.

6. *Clearing Right Bank.*—It was now evident that a purely surprise crossing was out of the question, and that it could only be accomplished by an organized assault. In order to have a freer hand in selecting a point of passage, Sir Stanley Maude decided to clear the right bank as a first step. This was finally accomplished on the morning of 16th February, after very heavy fighting, which there is not space to go into here.

Meantime Maude had kept his cavalry busy—no doubt, to give the Turks something to think about as to what he intended to do. These excursions included one to Hai Town, and a reconnaissance of the Suwaicha marsh with a view to finding a way round or across. It only resulted in the Horse Artillery guns getting bogged, and they were only recovered with difficulty. However, no doubt, the Turks heard of the trip and had their attention distracted in that direction.

Elaborate preparations were put in hand in the First Corps area a little behind Sannaiyat for a crossing there, and no doubt the Turks heard of these too. Sannaiyat was continually bombarded and on one occasion raided.

The bridging train had not been idle, and had valuable opportunity for practice on the Hai, which was now a swift river 200 yards broad.

The commander of the bridging train had been busy reconnoitring the Tigris under the immediate orders of Sir Stanley Maude. The latter carried secrecy to such extremes that reports to him and his further instructions took the form of personal letters.

On 16th February, when the right bank had been cleared, the bridging train commander was ordered to reconnoitre the river in the Shumran bend, and was told to take another officer out with him who could lead the bridging train up when required. This was disquieting, as it seemed the show was again going to be rushed, which meant probable failure. However, it started to rain that day and rained as it had never rained before in Mesopotamia. The result was that the whole country was flooded, and movement became quite impossible for nearly a week. This undoubtedly played an important part in the success of the crossing, as the time was utilized to organize every detail and practise on the Hai.



7. *Immediate Preparations.*—During this pause several more reconnaissances of the Shumran bend were made on its eastern and southern faces.

The eastern face was at first considered, as it was here the Turks had originally had their bridge, but it was found to be wide and did not lend itself to covering fire from the right bank. The southern end of the bend was then considered, and, after reconnaissance, selected. Here the river was made out to be 340 yards wide; the further bank on the inside of the curve was a very suitable shelving beach, but on this side the bank was vertical and would require considerable ramping before pontoons could be launched. Its configuration lent itself to concentrated and converging covering fire from our side.

It was, of course, necessary to get a covering party across before the construction of the bridge began. The opposite bank was entrenched and loopholed, and defended by machine guns. It was decided to ferry troops across at three distinct points, all downstream of the bridge, M. 32, M. 29, K. 55; the point of this was the danger of derelict pontoons floating down on the bridge during construction. It was hoped that at least one of the ferries would be successful. Tracks to the three ferry sites and the bridge site were carefully marked out so as to be easily distinguishable at night and yet invisible to enemy aircraft.

Meanwhile the actual crossing was being rehearsed and practised every night on the Hai. Volunteer rowers were obtained from the different British regiments, supplemented by sappers of the British field companies and the Madras Sappers and Miners, including their Burma Company, and the 128th Pioneers.

The bridging train handed over forty complete pontoons for ferrying purposes. Thirteen of these pontoons were allotted to each ferry; of these, three were kept in reserve. Crews of four rowers and a coxswain were detailed per pontoon and the leading parties were organised into parties of ten and equivalent loads of ammunition, Lewis guns, etc. Four complete reliefs for the crews were organized, the idea being to keep the ferries running all out for twenty-four hours should there be any delay with the bridge, and also to make ample provision for the inevitable casualties. Altogether 825 rowers were provided.

As a result of the heavy rain the Tigris had now come down in flood and was running at at least six knots. This made the building of the bridge a slow and delicate matter, without considering any opposition; the ferries, too, would drift many hundred yards downstream in the round trip; to meet this, definite parties were told off to tow them back to their original starting places. Fortunately, two motor-boats, heavily armoured, had been given to the bridging train for getting out anchors, and gear for launching them was devised. They were carried on heavy bullock-drawn wagons.

One battalion was to be ferried across at each ferry. 1st Norfolks at No. 1, 2/9th Gurkha Rifles at No. 2, 1/2nd Gurkha Rifles at No. 3. To assist the bridging train, a British field company and two companies

of British pioneers were allotted, and also a second doctor and twenty-four stretcher bearers, which was not as encouraging as it might be.

It was at first intended that the crossing should be made at night, but it was thought that all advantages of position and covering fire would be lost, and that no one would be able to see what was going on. So it was decided to start with the first streak of dawn, after a night approach march.

The 14th Indian Division were responsible for making good the crossing; this was a guarantee of a good show.

8. *Diversions*.—Before describing the actual crossing, it seems the best opportunity to describe what further steps Maude took to mystify and mislead his enemy.

In the first place, on 17th February, he ordered a surprise assault on Sannaiyat. Our troops captured the front trenches, but were afterwards driven out by a counter-attack. This was the fourth failure to capture this redoubtable position, but it was not in vain. It diverted the attention of the Turks from the principal attack and alarmed them to the extent that they moved more troops towards Sannaiyat. On the following days barrages were put down at uncertain intervals to keep the Turks in continual suspense of another attack, and also to get them used to bombardments followed by no attack.

The crossing was finally fixed for 22nd February, but on the previous day was postponed twenty-four hours to give the river a chance of going down, as the current was still very strong although it had passed its highest.

Two or three days previous to this, elaborate make-believe preparations were started at the Liquorice Factory: each night the Turks must have heard the movement of carts accompanied by the sound of planks being unloaded; their aeroplanes must have discovered a number of pontoons being stealthily towed up the Hai in that direction. They showed their suspicions by the active use of a searchlight opposite. Their suspicions must have been confirmed on the morning of the 23rd when daylight revealed artillery observation ladders in position all round the Kut peninsula.

At the Magasis bend a very successful small raid was made across the river in pontoons, the Turks were surprised and a mortar was captured and brought back. This probably was correctly taken by the Turks as bluff, and confirmed them in their belief that, if any attempt was going to be made, it would be at the Liquorice Factory. This was on the night 22/23rd February. Next morning our aeroplanes saw guns and infantry marching in that direction away from Shumran, where the real crossing had already commenced.

On the morning of the 22nd yet another attack on Sannaiyat was made by the Meerut Division, and by nightfall, after very heavy fighting, the first two lines of trenches had been captured.

9. *Night Approach*.—Returning again to the crossing, an hour before dark on the evening of 22nd February, the troops detailed to cover the

crossing and to seize the far bank moved out to the rendezvous, including the bridging train well over a mile in length. At this moment an enemy aeroplane passed over—very high, it is true, but they must have observed the troops on the move. Luckily the first part of the march might equally well lead to the Liquorice Factory, where, no doubt, it was thought to be going. In any case the Turks were quite certain that an attempt to cross the river was most unlikely, for they considered it doomed to failure, and possibly thought attempts were being made to divert their attention from Sannaiyat.

The night march passed off without incident. The three ferry parties reached their positions, unloading their pontoons and carrying them the last quarter of a mile; before midnight all preparations for launching them had been made and the troops lay down to rest.

The bridging train moved up to within one mile of the bank and parked to such time as their services would be required—that is, when our troops had established themselves on the opposite bank. Ramps were dug at the bridge site for the bridge itself, for launching pontoons, and for launching the motor-boats. The rest of the night passed quietly, the Turks opposite showing no signs of suspicion.

During the night, too, our hold of the right bank was extended from the Nahr al Massig up to K66c, and all the artillery of the Corps was moved into position all round the bend to cover the crossing, as, also, were 10 trench howitzers and 45 machine guns.

10. *Ferries*.—It was about five-thirty, just as the first signs of dawn were visible, that the first journey of the thirty pontoons, which had been previously quietly launched, commenced. The surprise was complete. At No. 1 Ferry, nearest the bridge site and immediately downstream of it, the surprise was so complete that the Norfolks captured 300 Turks and five machine guns. The Gurkhas at Nos. 2 and 3 Ferries were not so fortunate, being seen just as they were making the bank. However, it was too late to stop them landing, though heavy casualties were suffered both in the pontoons and in the subsequent hand-to-hand fighting on the bank.

By No. 1 Ferry the work of ferrying proceeded throughout the day, but at the other two the casualties to troops, rowers and pontoons were so heavy that work had to be stopped, and the remaining men were moved up to No. 1 Ferry to cross there. Before 7 a.m., out of 230 rowers supplied by the Hampshire Regiment, 110 had been hit.

By 7.30 a.m., about three companies of the Norfolks and 150 Gurkhas were on the left bank. By 3 p.m. all three battalions were established on an east and west line one mile north of the bridge, and a fourth battalion was being ferried across. Two counter-attacks down the centre and west side of the peninsula were beaten off, largely by artillery and machine-gun fire from the right bank.

11. *Bridge*.—It was about 7.30 a.m. that it was suggested that work on the bridge should start. At this time, however, the Norfolks from

No. 1 Ferry had not yet had time to work up the bank to the bridge site, and a considerable amount of sniping was going on. It was suggested that it would be better to wait a bit; it was then pointed out that the two lower ferries were out of action and that it was very necessary to give moral support by starting work on the bridge.

Orders were then given for the bridging train material to come up—the *personnel* had moved up earlier in the day. As previously arranged, the wagons and carts came up at full gallop at three hundred yards interval; they were rapidly unloaded and galloped off again. There was a deep dry canal at M32, two hundred yards or so below the bridge, similar to the one used by the bridging train at the Brick Kilns in December, and evidently the Turks thought we were going to use this one this time, as they kept up a steady stream of 5·9's on it all day. The bridging wagons had, therefore, only to run the gauntlet of the overs and none of them were hit. This is the more remarkable as the country was as flat as the rest of Mesopotamia, and devoid of cover except for the small river bund about three feet high, which, of course, gave no cover whatever to the wagons. The only assumption is that their arrangements for artillery observation were completely upset in the first few minutes.

The shore transom was placed in position and land anchorage fixed, while experiments were made as to rowing pontoons against the current; this was found impracticable. The first motor-boat was, therefore, ordered up, and it was a wonderful sight; towering as it did quite eleven feet in the air and visible for miles around, and drawn by sedate siege train bullocks, who ambled along as if nothing out of the ordinary was happening; it was a marvel to everyone present that they were never hit. The British field company undertook the launching and did it most successfully, though they had never had an opportunity of practising. As soon as the first motor-boat was in the water the second was ordered up and launched equally successfully. All this time accurate sniping was kept up from the other bank and a number of casualties to man and mule suffered. But from now onwards the far bank was sufficiently cleared, and no more sniping occurred. The construction of the bridge went on in earnest.

The rate of construction was entirely controlled by the time required to get out the anchors. The current was still running at at least five knots, and the handling of the launches was a delicate matter to prevent them fouling the cables of the portion of the bridge already constructed and the bridge itself. This did happen once when the bridge was half-built and nearly ended in disaster both to the launch and the bridge.

All this time the Turks kept up a steady fire with 5·9's on the nullah near by and frequently searched the river in the hope of finding ferry and bridge. H.E. shells fell in the water on either side of the bridge, covering it with spray, but neither the bridge itself nor any of the cables were touched. The motor-boats, too, had many narrow escapes.

The Turks had two other means of destroying the bridge. On

was by sending down floating mines, and the other by steaming a ship down on to it.

Floating mines were known to be inevitable. A portable mineboom had been prepared, but, owing to the flood, was regarded as a serious danger to the bridge and not used. Machine guns were told off to sink or fire them, but several passed the bridge, fortunately without hitting any pontoons.

Any ship sent down it was hoped to deal with by gunfire. However, they did not attempt it, though a definite aeroplane report, which fortunately proved to be false, that one was coming, added considerably to the anxiety of the work.

About three o'clock the required notice was given that the bridge would be ready in one and a half hours' time. A party was now sent across to start work on the far bank. Little was required here beyond cutting a passage through the river bund; but, as soon as work was started on this, it was apparently observed by the Turkish gunners, who, for the first time, tried to reach the bridge with shrapnel. Luckily, they were apparently too far back for their fuzes, and could not get the range. They now had the exact line for their H.E., and redoubled their efforts to get a direct hit, which was the only thing that mattered. Fortunately, our luck held and no damage was done.

By four-thirty the bridge was completely ready for traffic, 295 yards long, after 8 hours' actual work. The first to cross were some 500 Turkish prisoners, who had been captured early in the day, and had been sitting, sheltering under the bund on the far bank, watching the construction of the bridge and hoping to see it hit. Shortly afterwards the other two Brigades of the 14th Division, which had supplied the Brigade for ferrying, crossed without incident, and the Division held the line one mile north of the bridge for the night.

12. *24th February.*—Next morning, 24th February, the Cavalry Division crossed the bridge, followed by the artillery of the 14th Division, and the whole of the 13th Division. Traffic crossed the bridge in a continuous stream. Anything in difficulties was at once thrown clear. The Turks, however, put up a very stubborn fight in the broken ground at the northern end of the Shumran peninsula, in order to secure the retreat of their troops retiring from Sannaiyat, where three more lines of trenches had been captured on the 23rd before the crossing at Shumran had sealed its fate.

13. *Pursuit.*—During the night, 24th/25th February, the Turks withdrew and the pursuit to Baghdad began. Here the story must be left, but before doing so it should be emphasized that this one bridge was, for a time, the sole means of communication for three divisions. And later the Lahore Division also crossed.

14. *Lessons.*—In conclusion, it is desirable to draw attention to certain points which experience in these operations on the Tigris, and again



later on the Dialah, proved must be remembered if the operation is to be a success. These are :—

(1) An operation of this sort cannot be rushed. Accurate reconnaissance, elaborate detailed arrangements and, if possible, actual rehearsals are essential.

(2) The success of the first landing, on which everything depends, is entirely a question of surprise.

(3) Landings should be attempted in at least three places.

(4) The bridging train should not be committed until a definite footing has been obtained.

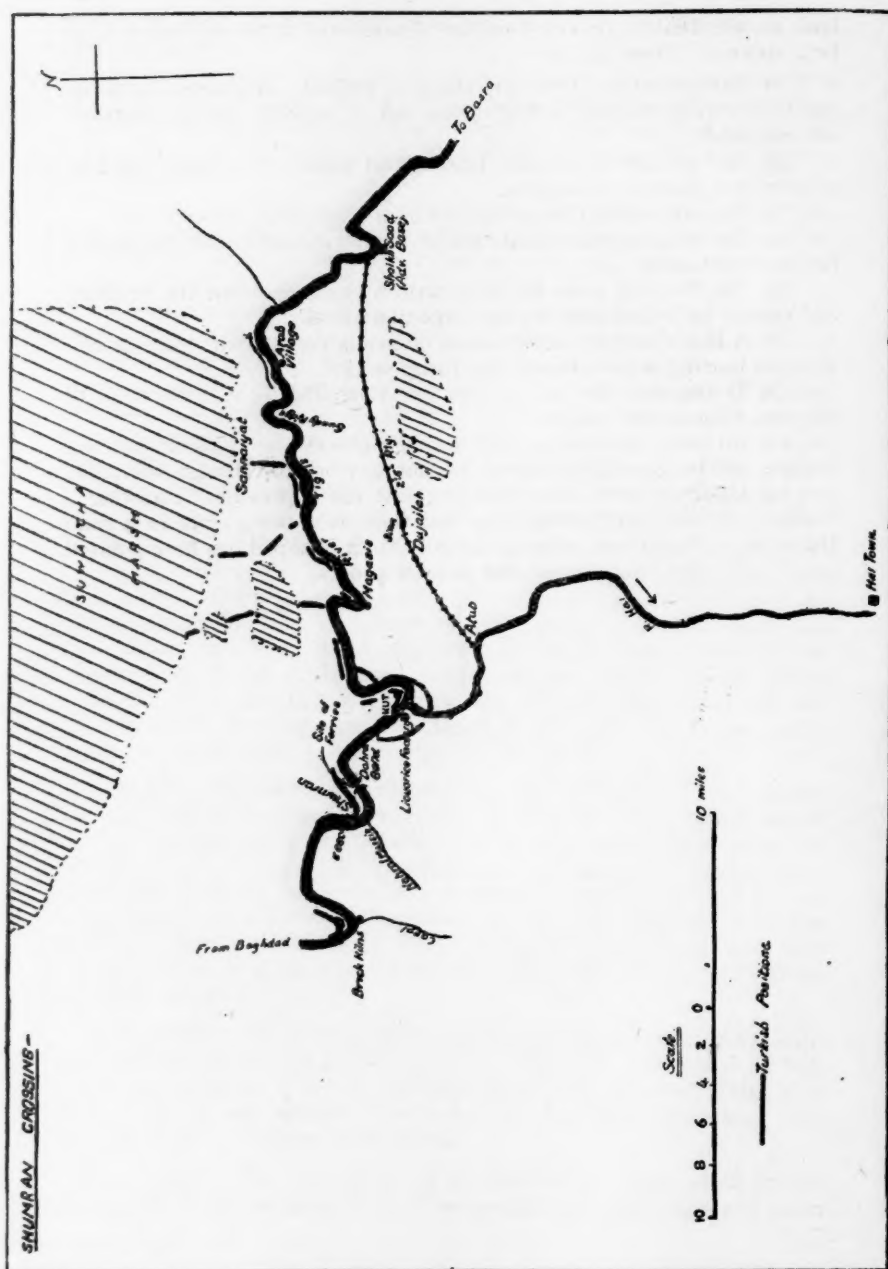
(5) The ferrying must be kept entirely separate from the bridging and cannot be looked after by the same individual.

(6) A liberal supply of men must be available, as, apart from casualties, pontooning is very heavy and tiring work.

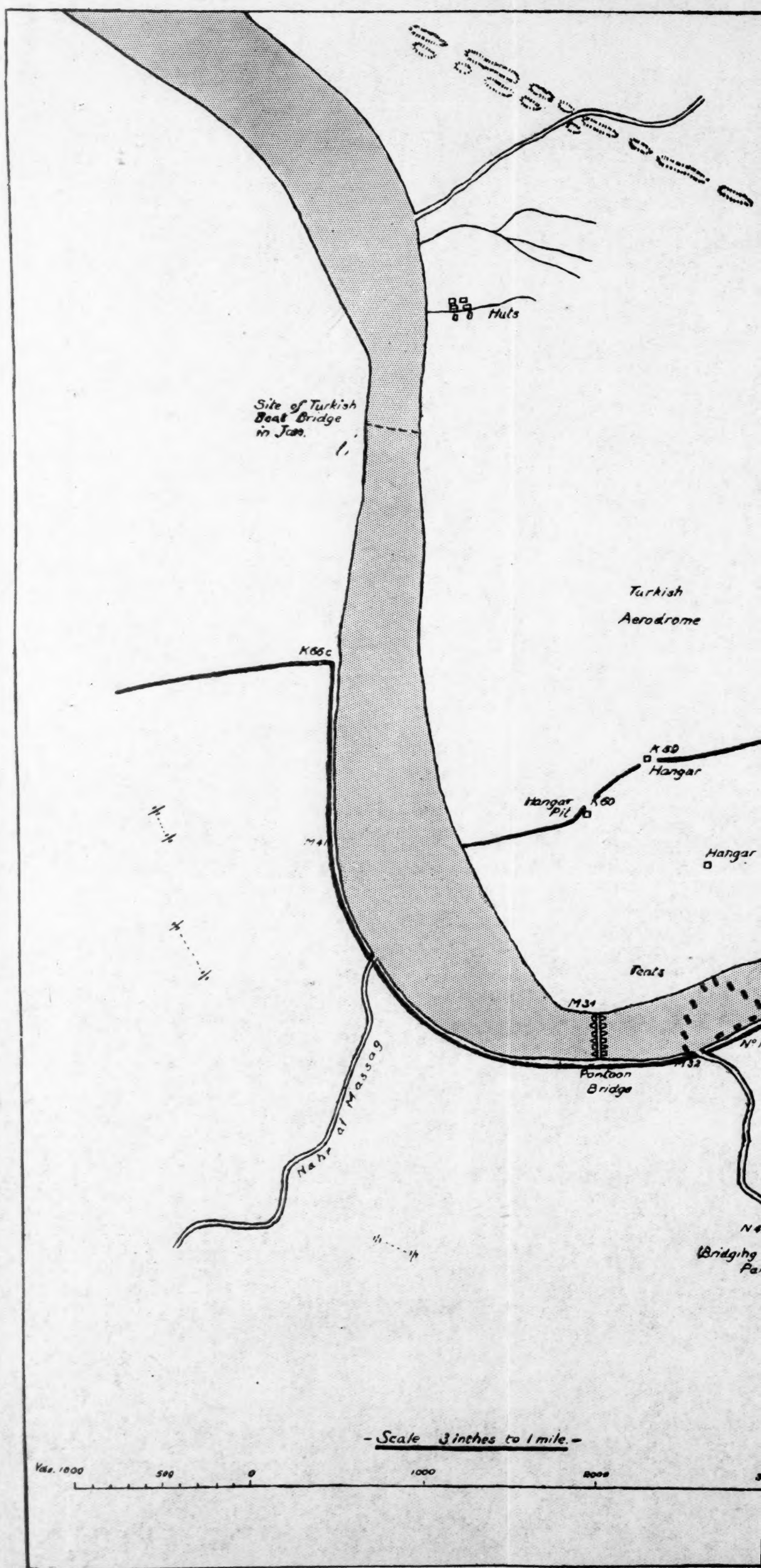
(7) Traffic over the bridge must be controlled by a staff officer of the senior formation concerned.

(8) All units must have had thorough practice in crossing pontoon bridges, and be thoroughly trained in what may be called bridge discipline.

(9) Lastly, a word of warning against the expression 'throwing a bridge.' It tends to give the idea that there is nothing more in it than throwing a cricket ball, whereas actually, as it is hoped has been pointed out, it is a very complicated and delicate process.

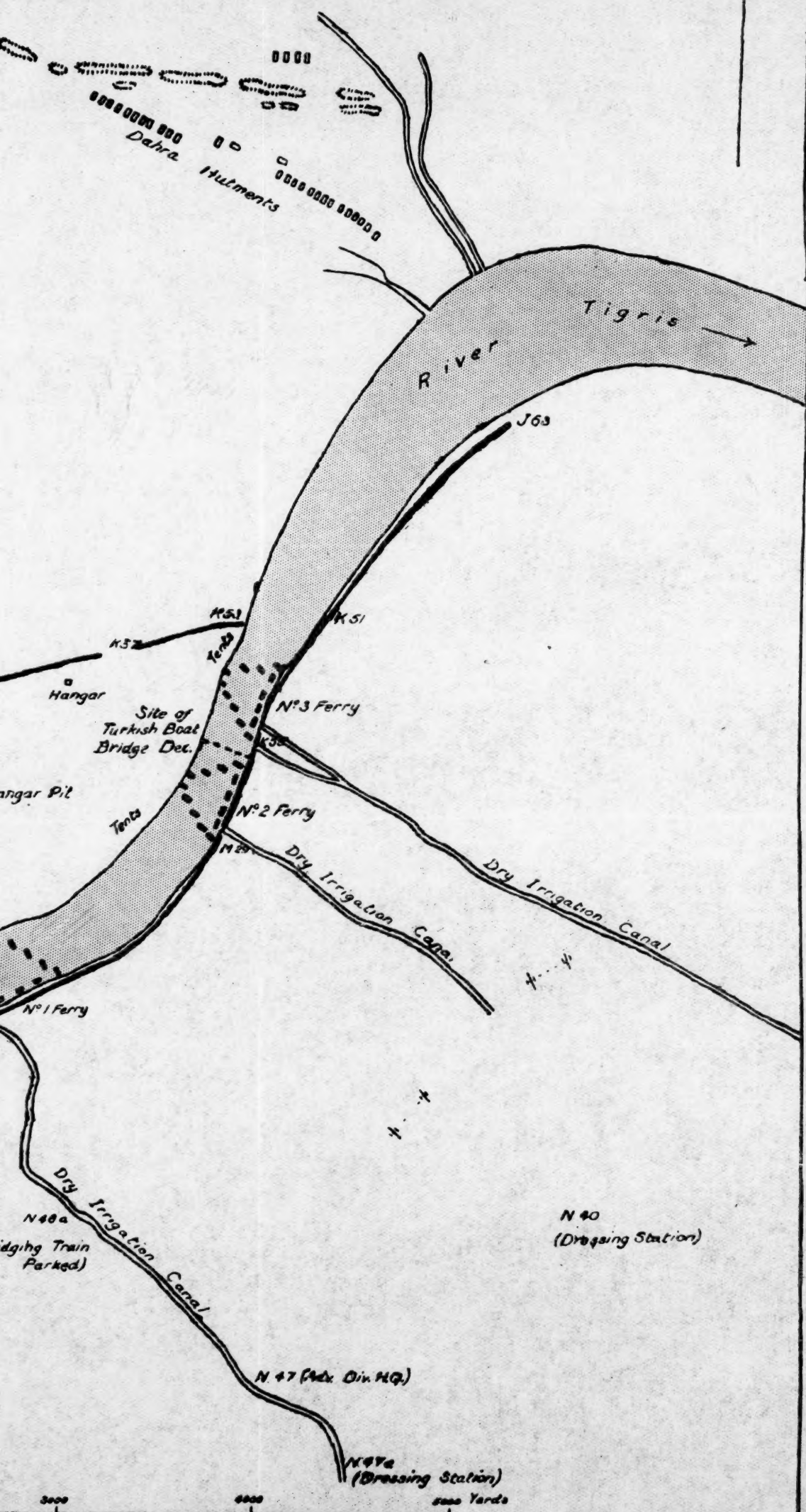






BRITISH COVERING POSITION ON RIGHT BANK, AND BRIDGEHEAD

# -SHUMRAN BEND-



GEHEAD POSITION ON LEFT BANK SHOWN BY THICK LINE.





## A RECORD OF THE BATTLES AND ENGAGEMENTS OF THE BRITISH ARMIES IN FRANCE AND FLANDERS, 1914-1918.

By LIEUTENANT E. A. JAMES,  
48th (South Midland) Divisional Signals T.A.

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THE following article is an attempt to produce a record of the Armies, Corps, Divisions, and, in certain instances, Infantry Brigades and Battalions engaged in the various Operations, Battles and Actions of the British Armies in France and Flanders during the Great War.

The framework on which the Record has been built is the Report of the Battles Nomenclature Committee published in May, 1921, and the names, dates and boundaries fixed in that Report have been carefully followed.

The work has been compiled from information obtained from many sources and a bibliography would include almost every official publication, formation, history and unit history dealing with the Western Front.

The various types of military operations, in order of importance, have been classified by the Battles Committee as follows:—1. The Phase. 2. Operations. 3. Battles. 4. The Battle with Tactical Incidents of that Battle. 5. Actions, etc. 6. Miscellaneous Incidents.

1. The "Phase." The war on the Western Front has been divided into seven Phases.

2. "Operations" is the word applied to a series of military events taking place in a certain area and between certain dates having a common purpose or common effect. When an Operation is composed of various Battles, lists of troops engaged are given under the names of the Battles and not under the general heading of Operations. In certain instances, however, Operations do not include any engagements of sufficient magnitude to merit the title of Battle—for example, Operations on the Ancre (11th January-13th March, 1917); in such a case a list of formations participating in the Operations is given.

3. The word "Battles" is used in the sense of Group of Battles. For example, the Battle of the Somme, 1916, includes twelve individual Battles and three Actions. All troops taking part in these separate Battles and Actions are shown under the group title (The Battles of the Somme, 1916) as well as under their individual Battle or Action.

A difficulty presented itself here as a division might come into line on the battle front within the chronological limits of a Group of

Battles without participating in any specified engagement. Thus, the 42nd Division was in line east of Ypres from 1st September to 18th September, 1917, without qualifying for any Battle or Action; as this period was not one of trench warfare in the ordinary sense of the word but rather one of consolidation and preparation, essentially part of the Group of Battles, it was decided to include such divisions in a separate list placed immediately after the general list of divisions engaged in the Battles.

In these general lists to Groups of Battles each division's number is followed by a figure in brackets, which indicates the number of individual Battles of the Group of Battles in which the division fought.

4. A "Battle" is one distinct engagement and all formations in line within the official geographical and chronological limits of that Battle are included in the list of troops taking part in that Battle. Certain Battles contain "Tactical Incidents" and the division or divisions taking part in that incident are shown.

5. "Actions" are followed by lists of Armies, Corps and Divisions taking part in that Action, except in Phase I, when the Corps is not shown.

6. "Miscellaneous Incidents" are confined to divisions.

In some cases it was impossible arbitrarily to decide whether a formation qualified for an engagement or not, particularly when the engagement boundary did not coincide with formation boundary; again in some engagements, such as the Battle of Delville Wood, no geographical boundaries have been given, which meant that the greatest latitude had to be given in order to avoid the accidental omission of any formation.

Any foreign troops which were engaged with the British are shown in italics.

The compiler will welcome any information that will be of assistance to him in the event of the Record being revised and published as a brochure.

In conclusion, the compiler wishes to thank Major A. F. Becke, of the Historical Section (Military Branch), Committee of Imperial Defence, for his invaluable advice and assistance, which enabled the Record to be made sufficiently accurate for publication.

#### PHASE I.—THE GERMAN INVASION, 1914.

The number of British troops engaged in the operations of this Phase was relatively small compared with the subsequent Phases and, consequently, many of the actions are of greater importance than they would have been had they taken place in later years. For example, during the Retreat from Mons, battalion fights are mentioned, while an attack carried out north of Passchendaele on 2nd December, 1917, by two divisions, 8th and 32nd, is not mentioned in the Report. To preserve a similar balance in the lists of troops engaged in this Phase

frequent mention is made of individual Regiments and Battalions and the division to which they belonged is shown in brackets Corps are not given for the Actions of this Phase.

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OPERATIONS. THE RETREAT FROM MONS.

(23rd August-5th September, 1914).

BATTLE OF MONS, 23rd-24th August.

Cavalry Division.<sup>1</sup>

I Corps : 1st and 2nd Divisions.

II Corps : 3rd and 5th Divisions

5th Cavalry Brigade.

19th Infantry Brigade.<sup>2</sup>

With subsidiary—

*Action of Élouges, 24th August.*

1st and 3rd Cavalry Brigades.

1/Norfolk Regiment and 1/Cheshire Regiment (5th Division).

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*Rearguard Action of Solesmes, 25th August.*

Cavalry Division.

7th Infantry Brigade (3rd Division).

19th Infantry Brigade.

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*Affair of Landrecies, 25th August.*

4th (Guards) Brigade (2nd Division).

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BATTLE OF LE CATEAU, 26th August.

Cavalry Division.

II Corps : 3rd and 5th Divisions

4th Division.

19th Infantry Brigade.

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<sup>1</sup> The cavalry of the B.E.F. was originally organised as the Cavalry Division, composed of the 1st, 2nd, 3rd and 4th Cavalry Brigades with Divisional Troops, and one independent brigade, the 5th Cavalry Brigade. On 5th September, 1914, the 3rd and 5th Cavalry Brigades were placed under the orders of Brigadier-General H. Gough. On 16th September, 1914, this force was numbered the 2nd Cavalry Division and the 1st, 2nd and 4th Cavalry Brigades became the 1st Cavalry Division.

For full details of the organisation of the B.E.F. in August and September, 1914, see Order of Battle, Appendix I., "History of the Great War, Military Operations," Volume I.

<sup>2</sup> The 19th Infantry Brigade began the war as an independent formation. On 31st August, 1914, the 4th Division and this brigade formed the IIIRD Corps. On 11th October, 1914, the 19th Infantry Brigade joined the 6th Division. It served with this Division and with the 27th Division for some time and was finally incorporated in the 2nd Division, where it replaced the 4th (Guards) Brigade, which had gone to the newly formed Guards Division in August, 1915.

*Rearguard Affair of Le Grand Fayt, 26th August.*

2/Connaught Rangers (5th Infantry Brigade, 2nd Division).

*Rearguard Affair of Étreux, 27th August.*

15th Hussars (2 troops) (1st Division).

2/Royal Munster Fusiliers (1st (Guards) Brigade, 1st Division).

In the immediate vicinity.

Remainder of 1st (Guards) Brigade (1st Division).

2/Welch Regiment (3rd Infantry Brigade, 1st Division).

*Affair of Cérizy, 28th August.*

5th Cavalry Brigade.

*Affair of Néry, 1st September*

1st Cavalry Brigade.

Troops who arrived and were engaged.

1/Middlesex Regiment (19th Infantry Brigade).

Troops who arrived at Néry after the engagement and troops who were in the immediate vicinity.

4th Cavalry Brigade.

Remainder of 19th Infantry Brigade.

4th Division.

*Rearguard Action of Crépy en Valois, 1st September.*

13th Infantry Brigade (5th Division).

*Rearguard Actions of Villers Cottlerêts, 1st September.*

3rd Cavalry Brigade.

4th (Guards) and 6th Infantry Brigades (2nd Division).

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OPERATIONS. THE ADVANCE TO THE AISNE.

(6th September-1st October, 1914).

BATTLE OF THE MARNE, 1914, 7th-10th September.

Cavalry Division.<sup>1</sup>

Gough's Command.<sup>1</sup>

I Corps: 1st and 2nd Divisions.

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<sup>1</sup> See footnote 1, page 459.



II Corps : 3rd and 5th Divisions.

III Corps : 4th Division and 19th Infantry Brigade.

Tactical Incidents :—

Passage of the Petit Morin...The list of troops engaged

Passage of the Marne.....for these two Tactical Incidents is exactly the same as that given above for the Battle of the Marne, 1914.

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BATTLE OF THE AISNE, 1914, 12th-15th September.

Cavalry Division.<sup>1</sup>

Gough's Command.<sup>1</sup>

I Corps : 1st and 2nd Divisions.

II Corps : 3rd and 5th Divisions.

III Corps : 4th Division and 19th Infantry Brigade.

Tactical Incidents :—

Passage of the Aisne and Capture of the Aisne Heights, including the Chemin des Dames.

The list of troops engaged in these Incidents is exactly the same as that given for the Battle of the Aisne, 1914.

With subsequent—

i. *Actions on the Aisne Heights, 20th September.*

2nd Cavalry Brigade.

I Corps : 1st Division (plus 18th Infantry Brigade attached from 6th Division) and 2nd Division.

II Corps : 3rd Division.

ii. *Action of Chivy, 26th September.*

I Corps : 1st Division.

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#### OPERATIONS. THE DEFENCE OF ANTWERP.

(4th-10th October, 1914).

Royal Naval Division.

The IV Corps was indirectly concerned with these operations, as the 7th Division (less 21st Infantry Brigade) reached Ghent on 9th October and the 3rd Cavalry Division and 21st Infantry Brigade, 7th Division, arrived at Bruges on the same day.

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<sup>1</sup> See footnote 1, page 459.

OPERATIONS. OPERATIONS IN FLANDERS, 1914.

(10th October-22nd November).

BATTLE OF LA BASSÉE, 10th October-2nd November.

2nd Cavalry Brigade.

II Corps: 3rd and 5th Divisions.

Indian Corps: Lahore (less Sirhind Brigade) and Meerut Divisions and Secunderabad Cavalry Brigade.

BATTLE OF MESSINES, 1914, 12th October-2nd November.

Cavalry Corps: 1st Cavalry and 2nd Cavalry Divisions  
Ferozepore (7th Indian Infantry) Brigade from  
Lahore Division.

1/Northumberland Fusiliers, 1/Lincoln Regiment (3rd Division).

2/K.O.S.B., 2/K.O.Y.L.I. (5th Division).

Queen's Own Oxfordshire Hussars.

London Scottish (14/London Regiment).

2/Essex Regiment, 2/R. Inniskilling Fusiliers (4th Division)

BATTLE OF ARMENTIÈRES, 13th October-2nd November.

III Corps: 4th and 6th Divisions (19th Infantry Brigade in 6th).

3/Worcester Regiment (3rd Division), 1/Dorset Regiment (5th Division).

Tactical Incidents:

Capture of Meteren, 4th Division.

THE BATTLES OF YPRES, 1914, 19th October-22nd November.

Corps: I and IV.

Divisions: 3rd Cavalry (3), 1st (3), 2nd (3), 3rd (1), 7th (2),  
7th Infantry Brigade<sup>1</sup> (less 3/Worcester Regiment)  
and 9th Infantry Brigade<sup>1</sup> of 3rd Division (1),  
15th Infantry Brigade<sup>1</sup> (less 1/Norfolk Regiment  
and 1/Dorset Regiment) of 5th Division (1),  
2/K.O.S.B. and 2/Duke of Wellington's Regiment  
of 5th Division (1) and London Scottish (14/London  
Regiment) (1).

Also 1st Cavalry Division went into line on 12th November but did not participate in a Battle.

<sup>1</sup> The 7th, 9th and 15th Infantry Brigades formed the 3rd Division for this fighting.

i. *Battle of Langemarck*, 1914, 21st-24th October.

I Corps : 1st and 2nd Divisions.

IV Corps : 3rd Cavalry and 7th Divisions.

ii. *Battle of Gheluvelt*, 29th-31st October.

I Corps : 3rd Cavalry, 1st, 2nd and 7th Divisions.

iii. *Battle of Nonne Bosschen*, 11th November.

I Corps : 3rd Cavalry, 1st, 2nd and 3rd Divisions.

7th<sup>1</sup> Infantry Brigade (less 3/Worcester Regiment)  
and 9th Infantry Brigade of 3rd Division.

15th<sup>1</sup> Infantry Brigade (less 1/Norfolk Regiment and  
1/Dorset Regiment) of 5th Division.

2/K.O.S.B. and 2/Duke of Wellington's Regiment of  
5th Division.

London Scottish (14/London Regiment).

APPENDIX TO PHASE I.

In view of various facts which have transpired and orders which have become accessible from German sources in recent years with regard to their intentions in Flanders in the autumn of 1914, it appears that it would be advisable to incorporate the Battles of Ypres, 1914, the Battle of Messines, 1914, and part of the Battle of Armentières into one engagement; the Battle of Ypres, 1914, 18th October to 22nd November, with the River Lys as the southern boundary and the Forêt d'Houthulst as the northern boundary.

The compiler puts forward this arrangement merely as a suggestion and not in any way as a criticism of the admirable Report of the Battles Committee.

THE BATTLE OF YPRES, 1914, 18th October-22nd November.

*Cavalry Corps* : 1st Cavalry and 2nd Cavalry Divisions.

Ferozepore Brigade of the Lahore Division.

2/K.O.S.B. and 2/K.O.Y.L.I. (5th Division).

The Queen's Own Oxfordshire Hussars.

The London Scottish (14/London).

*I Corps* : 1st, 2nd and 3rd Divisions.

7th and 9th Infantry Brigades of 3rd Division.<sup>1</sup>

15th Infantry Brigade of 5th Division.<sup>1</sup>

2/Duke of Wellington's Regiment (5th Division).

Leicestershire Yeomanry.

North Somerset Yeomanry.

1/Herts Regiment.

*III Corps* : 4th Division (11th and 12th Infantry Brigades).

*IV Corps* : 3rd Cavalry and 7th Divisions.

<sup>1</sup> The 7th, 9th and 15th Infantry Brigades formed the 3rd Division for this fighting.

The 14th Infantry Brigade, 5th Division, came within the battle limits on the 16th November, when it relieved the French, under 5th Division H.Q.

*Note.*—As formations and units frequently changed their corps during this confused fighting they are shown under the corps in which they were serving when they first entered the Battle.

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## PHASE II. TRENCH WARFARE, 1914-1916.

### OPERATIONS. WINTER OPERATIONS, 1914-15 (November-February).

*Defence of Festubert, 23rd-24th November.*

Indian Corps : Meerut Division.

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*Attack on Wytschaete, 14th December*

II Corps : 3rd Division.

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*Defence of Givenchy, 1914, 20th-21st December.*

Indian Corps : 1st, Lahore, and Meerut Divisions.

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*First Action of Givenchy, 1915, 25th January.*

First Army.<sup>1</sup>

I Corps : 1st Division.

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*Affairs of Cuinchy, 29th January, 1st and 6th February.*

First Army.

I Corps : 1st Division (29th January).

2nd Division (1st and 6th February).

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### OPERATIONS. SUMMER OPERATIONS, 1915 (March-October).

#### BATTLE OF NEUVE CHAPELLE, 10th-13th March.

First Army.

IV Corps : 7th and 8th Divisions.

Indian Corps : Lahore and Meerut Divisions.

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*Action of St. Eloi, 14th-15th March.*

Second Army.

V Corps : 27th Division.

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<sup>1</sup> The First and Second Armies were formed on 26th December, 1914, and the Third Army on 11th July, 1915.

*Capture of Hill 60. 17th-22nd April.*

Second Army.

II Corps : 5th Division.

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THE BATTLES OF YPRES, 1915, 22nd April-25th May.

Army : Second.

Corps : II and V.

Divisions : 1st Cavalry (2), 2nd Cavalry (2), 3rd Cavalry (1), 4th (3), 27th (4), 28th (4), 50th (3), Lahore (1) and 1st Canadian (2), also 13th Infantry Brigade of 5th Division (2).

The 5th Division was within the battle boundaries but did not take part in a battle.

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i. *Battle of Gravenstafel Ridge, 22nd-23rd April.*

Second Army.

V Corps : 27th, 28th and 1st Canadian Divisions and 13th Infantry Brigade of 5th Division.

Tactical Incidents :

The Gas Attack, 1st Canadian Division.

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ii. *Battle of St. Julien, 24th April-4th May.*

Second Army.

V Corps : 2nd Cavalry, 4th, 27th, 28th, 50th, Lahore and 1st Canadian Divisions and 13th Infantry Brigade of 5th Division.

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iii. *Battle of Frezenberg Ridge, 8th-13th May.*

Second Army.

V Corps : 1st Cavalry, 3rd Cavalry, 4th, 27th, 28th, and 50th Divisions.

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iv. *Battle of Bellewaarde Ridge,<sup>1</sup> 24th-25th May.*

Second Army.

V Corps : 1st Cavalry, 2nd Cavalry, 4th, 27th, 28th and 50th Divisions.

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<sup>1</sup> In the Report of the Battles Committee the name of this place is spelt Bellewaerde, but on all Belgian and official maps is spelt Bellewaarde. The second spelling of the word has been used throughout this Record.



BATTLE OF AUBERS RIDGE, 9th May.

First Army.

*Attack at Fromelles.*

IV Corps : 7th and 8th Divisions.

*Attack at Rue du Bois.*

I Corps : 1st and 47th Divisions.

Indian Corps : Lahore and Meerut Divisions.

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BATTLE OF FESTUBERT, 15th-25th May.

First Army.

I Corps : 2nd, 7th, 47th, 51st<sup>1</sup> and 1st Canadian Divisions.

Indian Corps : Lahore and Meerut Divisions.

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*Second Action of Givenchy, 1915, 15th-16th June.*

First Army.

IV Corps : 7th, 51st and 1st Canadian Divisions.

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*First Attack on Bellewaarde, 16th June.*

Second Army.

V Corps : 3rd Division.

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*Actions of Hooge, 19th and 30th July and 9th August*

Second Army.

V Corps : 3rd Division (on 19th July).

14th Division (on 30th July).

6th Division (on 9th August).

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THE BATTLE OF LOOS, 25th September-8th October.

First Army.

I Corps : 2nd, 7th, 9th and 28th Divisions.

IV Corps : 3rd Cavalry, 1st, 15th and 47th Divisions.

XI Corps : Guards, 12th, 21st and 24th Divisions.

Indian Corps<sup>2</sup> : 19th and Meerut Divisions.

With subsidiary—

i. *Action of Piètre, 25th September.*

First Army.

Indian Corps : Meerut Division.<sup>3</sup>

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<sup>1</sup> The 51st Division was transferred to Indian Corps on 22nd May.

<sup>2</sup> The Indian Corps, with 19th Division and Meerut Division, came within the battle area north of the La Bassée Canal from 29th September.

<sup>3</sup> The right of the 20th Division, IIIrd Corps, was involved in the attack of the Meerut Division.

ii. *Action of Bois Grenier, 25th September.*

First Army.

III Corps<sup>1</sup>: 8th Division.

iii. *Second Attack on Bellewaarde, 25th-26th September.*

Second Army.

V Corps: 3rd Division.

VI Corps: 14th Division.

And subsequent—

*Actions of the Hohenzollern Redoubt, 13th-19th October.*

First Army.

IV Corps: 1st and 47th Divisions.

XI Corps: Guards, 2nd, 12th and 46th Divisions.

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OPERATIONS. LOCAL OPERATIONS, 1916.

*Actions of the Bluff, 14th-15th February and 2nd March.*

Second Army.

V Corps: 17th Division (14th-15th February).

V Corps: 3rd and 17th Divisions (2nd March).

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*Actions of St. Eloi Craters, 27th March-16th April.*

Second Army.

V Corps: 3rd Division.

Canadian Corps: 2nd Canadian Division.

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*German Attack on Vimy Ridge, 21st May.*

First Army.

IV Corps: 47th Division.

Third Army.

XVII Corps: 25th Division.

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BATTLE OF MOUNT SORREL,<sup>2</sup> 2nd-13th June.

Second Army.

XIV Corps: 20th Division.

Canadian Corps: 1st Canadian, 2nd Canadian and 3rd Canadian Divisions.

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<sup>1</sup> Although the 23rd Division was actually holding the line in front of Bois Grenier it does not appear, technically, to qualify for this Action.

<sup>2</sup> Mount Sorrel is 1,200 yards north-east of Hill 60.

### PHASE III. THE ALLIED OFFENSIVE, 1916.

OPERATIONS. OPERATIONS ON THE SOMME (1st July-18th November, 1916).

THE BATTLES OF THE SOMME, 1916, 1st July-18th November.

Armies: Third, Fourth and Fifth.<sup>1</sup>

Corps: II, III, V, VII, VIII, X, XIII, XIV, XV, Canadian and I Anzac.

Divisions: 1st Cavalry (1), 2nd Indian Cavalry (2), Guards (2), 1st (5), 2nd (2), 3rd (4), 4th (2), 5th (4), 6th (3), 7th (5), 8th (1), 9th (4), 11th (2), 12th (3), 14th (1), 15th (3), 16th (2), 17th (1), 18th (6), 19th (5), 20th (5), 21st (5), 23rd (6), 24th (2), 25th (4), 29th (2), 30th (2), 31st (2), 32nd (3), 33rd (3), 34th (4), 35th (1), 36th (1), 37th (1), 38th (1), 39th (3), 40th (1), 41st (2), 46th (1), 47th (2), 48th (4), 49th (4), 50th (3), 51st (2), 55th (4), 56th (5), 63rd (1), 1st Canadian (4), 2nd Canadian (4), 3rd Canadian (4), 4th Canadian (3), 1st Australian (1), 2nd Australian (1), 4th Australian (1) and New Zealand (3).

The 5th Australian Division went into line within the limits of the Battles but did not participate in any specified battle.

Total number of divisions engaged 54, and 2 cavalry

#### i. *Battle of Albert, 1916, 1st-13th July.*

##### Fourth Army.

III Corps: 1st, 8th, 12th, 19th, 23rd and 34th Divisions.

VIII Corps: 4th, 29th, 31st and 48th Divisions.

X Corps: 12th, 25th, 32nd, 36th and 49th Divisions.

XIII Corps: 3rd, 9th, 18th, 30th and 35th Divisions.

XV Corps: 7th, 17th, 21st, 33rd and 38th Divisions.

##### Reserve Army.

This Army took over the VIII and X Corps from the Fourth Army on 4th July, 1916.

##### Tactical Incidents:

Capture of Montauban: 30th Division.

Capture of Mametz: 7th Division.

Capture of Fricourt: 17th Division.

Capture of Contalmaison: 23rd Division.

Capture of La Boisselle: 19th Division.

<sup>1</sup> The Fourth Army was formed on 5th February, 1916, and the Reserve Army on 23rd May, 1916. On 4th July, 1916, during the Battle of Albert, 1916, the latter took over the VIII and X Corps from the Fourth Army. On and after the 30th October the Reserve Army was designated the Fifth Army.

With subsidiary—

*Attack on the Gommecourt Salient, 1st July.*

Third Army.

VII Corps : 46th and 56th Divisions.

ii. *Battle of Bazentin Ridge, 14th-17th July.*

Fourth Army.

2nd Indian Cavalry Division.

II Corps : 1st, 23rd and 34th<sup>1</sup> Divisions.

XIII Corps : 3rd, 9th and 18th Divisions.

XV Corps : 7th, 21st and 33rd Divisions.

Reserve Army.

X Corps : 25th, 32nd, 48th and 49th Divisions.

Tactical incidents :

Capture of Longueval : 3rd and 9th Divisions.

Capture of Trônes Wood : 18th Division.

Capture of Ovillers : 48th Division.

With subsidiary—

*Attack at Fromelles (on the Aubers Ridge), 19th July.*

First Army.

XI Corps : 61st and 5th Australian Divisions.

And subsequent—

*Attacks on High Wood,<sup>2</sup> 20th-25th July.*

Fourth Army.

III Corps : 19th Division.

XV Corps : 5th, 7th, 33rd and 51st Divisions.

iii. *Battle of Delville Wood, 15th July-3rd September.*

Fourth Army.

XIII Corps : 2nd, 3rd, 9th and 24th Divisions and 53rd Infantry Brigade of 18th Division.

XIV Corps :<sup>3</sup> 20th and 24th Divisions.

XV Corps : 7th Division.

<sup>1</sup> The 102nd and 103rd Infantry Brigades of the 34th Division had suffered very heavy losses in the Battle of Albert, 1916. These two Brigades changed places with the 111th and 112th Infantry Brigades of the 37th Division and went into line with the 37th Division, IV Corps, First Army, on Vimy Ridge, while the two Brigades of the 37th Division, mentioned above, fought in the Battle of the Bazentin Ridge under the 34th Division.

<sup>2</sup> High Wood was finally captured by the 47th Division, III Corps, on 15th<sup>th</sup> September, 1916.

<sup>3</sup> The XIV Corps relieved the XIII Corps at midnight 16-17 August, 1916.

iv. *Battle of Pozieres Ridge, 23rd July-3rd September.*

Fourth Army.

III Corps : 1st, 15th, 19th, 23rd and 34th Divisions.

Reserve Army.

II Corps<sup>1</sup> : 12th, 25th, 48th and 49th Divisions.

X Corps : 12th, 48th and 49th Divisions.

I Anzac Corps : 1st Australian, 2nd Australian, and 4th Australian Divisions.

Tactical Incidents :

Fighting for Mouquet Farm,<sup>2</sup> 12th, 25th, 48th, 1st Australian, 2nd Australian and 4th Australian Divisions.

v. *Battle of Guillemont, 3rd-6th September.*

Fourth Army.

XIV Corps : 5th, 16th and 20th Divisions.

XV Corps : 7th, 24th and 55th Divisions.

vi. *Battle of Ginchy, 9th September.*

Fourth Army.

XIV Corps : 16th and 56th Divisions.

XV Corps : 55th Division.

vii. *Battle of Flers-Courcelette,<sup>3</sup> 15th-22nd September.*

Fourth Army.

1st Cavalry and 2nd Indian Cavalry Divisions.

III Corps : 1st, 15th, 23rd, 47th and 50th Divisions and 103rd

Infantry Brigade of 34th Division.

XIV Corps : Guards, 5th, 6th, 20th and 56th Divisions.

XV Corps : 14th, 21st, 41st, 55th and New Zealand Divisions

Reserve Army.

II Corps : 11th and 49th Divisions.

Canadian Corps : 1st Canadian, 2nd Canadian and 3rd Canadian Divisions.

Tactical Incidents :

Capture of Martinpuich : 15th Division.

<sup>1</sup> The II Corps took over the front and divisions in line of the X Corps on 1st August, 1916.

<sup>2</sup> Part of Mouquet Farm was captured by the 3rd Canadian Division on 16th September, 1916, and the Farm was finally captured by the 11th Division on 26th September, 1916.

<sup>3</sup> This battle is particularly noteworthy for two reasons. It was the first occasion on which tanks went into action and was the first day on which British artillery fired a creeping or, as it was then called, rolling barrage.



viii. *Battle of Morval, 25th-28th September.*

Fourth Army.

III Corps : 1st, 23rd and 50th Divisions.

XIV Corps : Guards, 5th, 6th, 20th and 56th Divisions.

XV Corps : 21st, 55th and New Zealand Divisions.

Tactical Incidents :

Capture of Combles : 56th Division.

Capture of Lesbœufs : Guards and 6th Divisions.

Capture of Gueudecourt : 21st Division.

ix. *Battle of Thiepval Ridge, 26th-28th September.*

Reserve Army.

II Corps : 11th and 18th Divisions.

V Corps : 39th Division.

Canadian Corps : 1st Canadian, 2nd Canadian and 3rd Canadian Divisions.

x. *Battle of the Transloy Ridges, 1st-18th October.*

Fourth Army.

III Corps : 9th, 15th, 23rd, 47th and 50th Divisions.

XIV Corps : 4th, 6th, 20th and 56th Divisions.

XV Corps : 12th, 21st, 30th, 41st and New Zealand Divisions and 88th Infantry Brigade of 29th Division.

Reserve Army.

Canadian Corps : 1st Canadian, 2nd Canadian, 3rd Canadian and 4th Canadian Divisions.

Tactical Incidents :

Capture of Eaucourt l'Abbaye : 47th Division.

Capture of Le Sars : 23rd Division.

Attacks on the Butte de Warlencourt<sup>1</sup>: 9th, 15th, 23rd and 47th Divisions.

xi. *Battle of the Ancre Heights, 1st October-11th November.*

Reserve Army.

II Corps : 18th, 19th, 25th, 39th<sup>2</sup> and 4th Canadian<sup>3</sup> Divisions.

V Corps : 39th Division.

<sup>1</sup> The 48th and 50th Divisions came in after the end of the Battle of the Transloy Ridges and carried out attacks on the Butte de Warlencourt.

<sup>2</sup> The 39th Division was transferred from the V Corps to the II Corps on 4th October, 1916.

<sup>3</sup> The 4th Canadian Division was transferred from the Canadian Corps to the II Corps on 17th October, 1916, when the Canadian Corps was withdrawn from the battle front.

Canadian Corps: 1st Canadian, 2nd Canadian, 3rd Canadian and 4th Canadian Divisions.<sup>1</sup>

Tactical Incidents:

Capture of Schwaben Redoubt: 18th and 39th Divisions.

Capture of Stuff Redoubt<sup>2</sup>: 25th Division.

Capture of Regina Trench: 18th, 25th, 39th and 4th Canadian Divisions.

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xii. *Battle of the Ancre, 1916, 13th-18th November.*

Fourth Army.

III Corps: 48th Division.

Fifth Army.

II Corps: 18th, 19th, 39th and 4th Canadian Divisions.

V Corps: 2nd, 3rd, 32nd, 37th, 51st and 63rd Divisions.

XIII Corps: 31st Division and 120th Infantry Brigade of 40th Division.

Tactical Incidents:

Capture of Beaumont Hamel: 51st Division.

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PHASE IV. THE ADVANCE TO THE HINDENBURG LINE,  
1917.

As there were no Battles in this Phase, a general list of formations engaged in the Operations is given, as explained in the Introduction.

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OPERATIONS. OPERATIONS ON THE ANCRE (11th January-13th March,  
1917).

Fifth Army.

II Corps: 2nd, 18th and 63rd Divisions.

IV Corps: 2nd, 11th, 51st and 61st Divisions.

V Corps: 7th, 19th, 31st, 32nd, 46th and 62nd Divisions.

I Anzac Corps: 1st Australian, 2nd Australian, 4th Australian and 5th Australian Divisions.

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*Actions of Miraumont, 17th-18th February.*

Fifth Army.

II Corps: 2nd, 18th and 63rd Divisions.

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<sup>1</sup> See footnote 3, p. 471.

<sup>2</sup> The 11th Division had gained a footing in the Stuff Redoubt in the fighting at the end of September.

*Capture of the Thilloys, 25th February-2nd March.*

Fifth Army.

II Corps: 2nd Division.

I Anzac Corps: 1st Australian, 2nd Australian and 5th Australian Divisions.

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*Capture of Irles, 10th March.*

Fifth Army.

II Corps: 2nd and 18th Divisions.

I Anzac Corps: 2nd Australian Division.

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OPERATIONS GERMAN RETREAT TO THE HINDENBURG LINE.

(14th March-5th April, 1917.)

Third Army

VII Corps: 14th, 21st, 30th and 56th Divisions.

Fourth Army.

5th Cavalry Division.<sup>1</sup>

III Corps: 1st, 48th and 59th Divisions.

IV Corps: 32nd, 35th and 61st Divisions.

XIV Corps: Guards and 20th<sup>2</sup> Divisions.

XV Corps: 8th, 20th and 40th Divisions.

Fifth Army.

4th Cavalry Division.<sup>1</sup>

II Corps: 2nd and 18th Divisions.

V Corps: 7th, 46th and 62nd Divisions.

XVIII Corps: 58th Division.

I Anzac Corps: 2nd Australian, 4th Australian and 5th Australian Divisions.

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*Capture of Bapaume, 17th March.*

Fifth Army.

I Anzac Corps: 2nd Australian Division.

*Occupation of Péronne, 18th March.*

48th Division (III Corps).

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<sup>1</sup> The 1st and 2nd Indian Cavalry Divisions became the 4th and 5th Cavalry Divisions on 26th November, 1916.

<sup>2</sup> The 20th Division was transferred from XIV Corps to XV Corps on 25th March, 1917.

# PHASE V. THE ALLIED OFFENSIVES, 1917.

OPERATIONS. THE ARRAS OFFENSIVE (9th April-15th May, 1917).

THE BATTLES OF ARRAS, 1917, 9th April-4th May.

Armies: First and Third.

Corps: Cavalry, I, VI, VII, XIII, XVII and Canadian.

Divisions: 1st Cavalry (1), 2nd Cavalry (1), 3rd Cavalry (1), 2nd (3), 3rd (4), 4th (2), 5th (3), 9th (2), 12th (3), 14th (2), 15th (2), 17th (2), 18th (1), 21st (2), 24th (1), 29th (2), 30th (2), 31st (1), 33rd (1), 34th (3), 37th (3), 50th (2), 51st (2), 56th (2), 63rd (2), 1st Canadian (3), 2nd Canadian (4), 3rd Canadian (3), and 4th Canadian (1).

Total number of Divisions engaged, 26 and 3 Cavalry.

## i. *Battle of Vimy Ridge, 9th-14th April.*

First Army.

I Corps: 24th Division.

Canadian Corps: 5th, 1st Canadian, 2nd Canadian, 3rd Canadian and 4th Canadian Divisions.

## *First Battle of the Scarpe, 1917, 9th-14th April.*

First Army.

XIII<sup>1</sup> Corps: 2nd and 34th Divisions.

Third Army.

Cavalry Corps: 1st Cavalry, 2nd Cavalry and 3rd Cavalry Divisions.

VI Corps: 3rd, 12th, 15th, 17th, 29th and 37th Divisions.

VII Corps: 14th, 21st, 30th, 50th and 56th Divisions.

XVII Corps: 4th, 9th, 34th and 51st Divisions.

Tactical Incidents:

Capture of Monchy le Preux: 3rd Cavalry and 37th Divisions.

Capture of Wancourt Ridge: 50th Division.

## ii. *Second Battle of the Scarpe, 1917, 23rd-24th April.*

First Army.

XIII Corps: 63rd Division.

Third Army.

VI Corps: 15th, 17th and 29th Divisions and 8th Infantry Brigade of 3rd Division.

VII Corps: 30th, 33rd and 50th Divisions.

<sup>1</sup> The XIII Corps came into line on the 12th April, 1917, when the 2nd Division relieved the 51st Division, XVII Corps.

XVII Corps: 37th and 51st Divisions and 103rd Infantry Brigade of 34th Division.

Tactical Incidents:

Capture of Guémappe: 15th Division.

Capture of Gavrelle: 63rd Division.

With subsidiary—

*Attack on La Coulotte, 23rd April.*

First Army.

Canadian Corps: 5th, 2nd Canadian and 3rd Canadian Divisions

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iii. *Battle of Arleux, 28th-29th April.*

First Army.

XIII Corps: 2nd and 63rd Divisions.

Canadian Corps: 1st Canadian and 2nd Canadian Divisions.

Third Army.

VI Corps: 3rd and 12th Divisions.

XVII Corps: 34th and 37th Divisions.

---

iv. *Third Battle of the Scarpe, 1917, 3rd-4th May.*

First Army.

XIII Corps: 2nd, 5th and 31st Divisions.

Canadian Corps: 1st Canadian, 2nd Canadian and 3rd Canadian Divisions.

Third Army.

VI Corps: 3rd, 12th and 56th Divisions.

VII Corps: 14th, 18th and 21st Divisions.

XVII Corps: 4th and 9th Divisions.

Tactical Incidents:

Capture of Fresnoy: 1st Canadian Division.

With subsequent—

i. *Capture of Rœux, 13th-14th May.*

Third Army.

VI Corps: 3rd and 12th Divisions.

XVII Corps: 17th and 51st Divisions.

ii. *Capture of Oppy Wood, 28th June.*

First Army.

XIII Corps: 5th and 31st Divisions.

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OPERATIONS. FLANKING OPERATIONS TO THE ARRAS OFFENSIVE.

(a) ROUND BULLECOURT (11th April-16th June).

Fifth Army.

V Corps: 7th, 58th and 62nd Divisions.

I Anzac Corps: 1st Australian, 2nd Australian, 4th Australian and 5th Australian Divisions.

---

*First Attack on Bullecourt, 11th April.*

Fifth Army.

V Corps: 62nd Division.

I Anzac Corps: 4th Australian Division.

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*German Attack on Lagnicourt, 15th April.*

Fifth Army.

V Corps: 62nd Division.

I Anzac Corps: 1st Australian and 2nd Australian Divisions.

---

BATTLE OF BULLECOURT, 3rd-17th May.

Fifth Army.

V Corps: 7th, 58th and 62nd Divisions.

I Anzac Corps: 1st Australian, 2nd Australian and 5th Australian Divisions.

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*Actions on the Hindenburg Line,<sup>1</sup> 20th May-16th June.*

Third Army.

VII Corps: 21st and 33rd Divisions.

Fifth Army.

V Corps<sup>2</sup>: 7th, 58th and 62nd Divisions.

I Anzac Corps<sup>2</sup>: 5th Australian Division.

IV Corps<sup>2</sup>: 20th Division.

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<sup>1</sup> It appears that the north boundary of these actions should have been the Sensée River instead of the Ecoist St. Mein Road. The main feature of these actions was the attack of the 33rd Division on the Hindenburg Line between Bullecourt and the Sensée River; that is, outside the official battle area. The 33rd and 21st Divisions, which fought on this portion of the front, have been included in the list.

<sup>2</sup> Considerable changes in the higher formations took place during this fighting. At 10 a.m., 26th May, the IV Corps and 20th Division relieved the I Anzac Corps and the 5th Australian Division, and at 10 a.m. on 31st May the Third Army took over the IV and V Corps from the Fifth Army.

(b) TOWARDS LENS (3rd June-26th August).

First Army.

I Corps: 6th and 46th Divisions.

Canadian Corps: 1st Canadian, 2nd Canadian, 3rd Canadian and 4th Canadian Divisions.

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*Affairs south of the Souchez River, 3rd-25th June.*

First Army.

Canadian Corps: 3rd Canadian and 4th Canadian Divisions.

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*Capture of Avion, 26th-29th June.*

First Army.

Canadian Corps: 3rd Canadian and 4th Canadian Divisions.

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BATTLE OF HILL 70, 15th-25th August.

First Army.

I Corps: 6th and 46th Divisions.

Canadian Corps: 1st Canadian, 2nd Canadian, 3rd Canadian and 4th Canadian Divisions.

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OPERATIONS. THE FLANDERS OFFENSIVE (7th June-10th November, 1917).

THE BATTLE OF MESSINES, 1917, 7th-14th June.

Second Army.

IX Corps: 11th, 16th, 19th and 36th Divisions.

X Corps: 23rd, 24th, 41st and 47th Divisions.

II Anzac Corps:<sup>1</sup> 25th, 3rd Australian, 4th Australian and New Zealand Divisions.

Tactical Incidents:

Capture of Wytschaete: 16th and 36th Divisions.

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*German Attack on Nieuport, 10th-11th July.*

Fourth Army.

XV Corps: 1st and 32nd Divisions.

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<sup>1</sup> The southern portion of the II Anzac Corps front was held by two battalions of the 170th Infantry Brigade, 57th Division, under 3rd Australian Division from 7th to 10th June and from then until the end of the battle by the 4th New Zealand Infantry Brigade under 3rd Australian Division to 12th June, then under New Zealand Division.

THE BATTLE OF YPRES, 1917<sup>1</sup>, 31st July-10th November

Armies: Second and Fifth.

Corps: II, V, IX, X, XIV, XVIII, XIX Canadian, I Anzac and II Anzac.

Divisions: Guards (4), 1st (1), 3rd (2), 4th (4), 5th (4), 7th (4), 8th (2), 9th (2), 11th (4), 14th (3), 15th (2), 16th (1), 17th (2), 18th (4), 19th (6), 20th (3), 21st (3), 23rd (4), 24th (2), 25th (1), 29th (5), 30th (1), 33rd (2), 35th (1), 36th (1), 37th (6), 38th (2), 39th (5), 41st (2), 48th (4), 49th (1), 50th (1), 51st (2), 55th (2), 56th (1), 57th (1), 58th (3), 59th (2), 61st (1), 63rd (1), 66th (1), 1st Canadian (1), 2nd Canadian (1), 3rd Canadian (1), 4th Canadian (1), 1st Australian (5), 2nd Australian (5), 3rd Australian (3), 4th Australian (3), 5th Australian (4) and New Zealand (3).

The 34th, 42nd and 47th Divisions went into line on the battle-front, but did not take part in any specified battle.

Total number of divisions engaged, 54.

i. *Battle of Pilckem Ridge, 31st July-2nd August.*

Second Army.

X Corps: 41st Division.

Fifth Army.

II Corps: 8th, 24th, 25th and 30th Divisions and 53rd Infantry Brigade, 18th Division.

XIV Corps: Guards and 38th Divisions.

XVIII Corps: 39th and 51st Divisions.

XIX Corps: 15th and 55th Divisions.

With subsequent—

*Capture of Westhoek, 10th August.*

Fifth Army.

II Corps: 18th and 25th Divisions.

ii. *Battle of Langemarck, 1917, 16th-18th August.*

Second Army.

X Corps: 39th Division.

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<sup>1</sup> The Battles Nomenclature Committee has defined a common geographical boundary for the eight individual battles of the Battles of Ypres, 1917, and the compiler has adhered to this boundary in deciding which formations qualify for the various battles, although, in several cases, it meant the inclusion of troops which did not actually attack. It would have been more satisfactory if a separate geographical boundary had been assigned to each battle, as was done for the Battles of the Somme, 1916.

Fifth Army.

II Corps: 8th, 14th, 24th and 56th Divisions and 53rd Infantry Brigade, 18th Division.

XIV Corps: 20th, 29th and 38th Divisions.

XVIII Corps: 11th and 48th Divisions.

XIX Corps: 15th, 16th, 36th and 61st Divisions.

iii.<sup>1</sup> *Battle of the Menin Road Ridge, 20th-25th September.*

Second Army.

IX Corps: 19th and 37th Divisions.

X Corps: 23rd, 33rd, 39th and 41st Divisions.

I Anzac Corps: 1st Australian, 2nd Australian, 4th Australian and 5th Australian Divisions.

Fifth Army.

V Corps: 3rd, 9th, 55th and 59th Divisions.

XIV Corps: Guards, 20th and 29th Divisions.

XVIII Corps: 51st and 58th Divisions.

iv. *Battle of Polygone Wood,<sup>2</sup> 26th September-3rd October.*

Second Army.

IX Corps: 19th and 37th Divisions.

X Corps: 5th, 7th, 21st, 23rd, 33rd and 39th Divisions.

<sup>1</sup> The Fifth Army carried out three minor operations in the latter part of August which are not mentioned in the Official Battle List. The following extract from paragraph 48 of Lord Haig's Despatch, dated 25th December, 1917, deals with these operations:—

" . . . on 19th, 22nd and 27th August, positions of considerable local importance in the neighbourhood of St. Julien were captured with some hundreds of prisoners, as the result of minor attacks, conducted under the most unfavourable conditions of ground and weather. The ground gained represented an advance of about 800 yards on a front of over two miles."

The troops of Fifth Army engaged were:

19th August.

XVIII Corps: 11th and 48th Divisions.

22nd August.

II Corps: 14th and 47th Divisions.

XVIII Corps: 11th and 48th Divisions.

XIX Corps: 15th and 61st Divisions.

27th August.

XIV Corps: 38th Division.

XVIII Corps: 11th and 48th Divisions.

XIX Corps: 61st Division.

<sup>2</sup> The name of this wood is spelt Polygon in the Official Report and Polygone on the Belgian Survey 1/20,000 and the British 1/40,000 maps. The latter version has been adopted in this Record.

I Anzac Corps: 1st Australian, 2nd Australian, 4th Australian and 5th Australian Divisions.

II Anzac Corps<sup>1</sup>: 3rd, 59th, 3rd Australian and New Zealand Divisions.

Fifth Army.

V Corps<sup>1</sup>: 3rd and 59th Divisions.

XIV Corps: 4th, 20th and 29th Divisions.

XVIII Corps: 11th, 48th and 58th Divisions.

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v. *Battle of Broodseinde, 4th October.*

Second Army.

IX Corps: 19th and 37th Divisions.

X Corps: 5th, 7th and 21st Divisions.

I Anzac Corps: 1st Australian and 2nd Australian Divisions.

II Anzac Corps: 3rd Australian and New Zealand Divisions.

Fifth Army.

XIV Corps: 4th and 29th Divisions.

XVIII Corps: 11th and 48th Divisions.

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vi. *Battle of Poelcappelle, 9th October.*

Second Army.

IX Corps: 19th and 37th Divisions.

X Corps: 5th and 7th Divisions.

I Anzac Corps: 1st Australian and 2nd Australian Divisions.

II Anzac Corps: 49th and 66th Divisions.

Fifth Army.

XIV Corps: Guards, 4th and 29th Divisions.

XVIII Corps: 11th and 48th Divisions.

---

vii. *First Battle of Passchendaele, 12th October.*

Second Army.

IX Corps: 19th and 37th Divisions.

X Corps: 14th and 23rd Divisions.

I Anzac Corps: 4th Australian and 5th Australian Divisions.

II Anzac Corps: 3rd Australian and New Zealand Divisions.

Fifth Army.

XIV Corps: Guards, 4th and 17th Divisions.

XVIII Corps: 9th and 18th Divisions.

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<sup>1</sup> The II Anzac Corps relieved the V Corps on 28th September, taking over the 3rd and 59th Divisions in line. After relief, this corps sector passed to Second Army from Fifth Army.



viii.<sup>1</sup> *Second Battle of Passchendaele, 26th October-10th November.*

Second Army.

II Corps<sup>2</sup>: 1st, 58th and 63rd Divisions.

IX Corps: 19th and 37th Divisions.

X Corps: 5th, 7th, 14th, 21st, 23rd and 39th Divisions.

Canadian Corps: 1st Canadian, 2nd Canadian, 3rd Canadian, and 4th Canadian Divisions.

I Anzac Corps: 1st Australian, 2nd Australian and 5th Australian Divisions.

Fifth Army.

XIV Corps<sup>3</sup>: 35th, 50th and 57th Divisions.

XVIII Corps<sup>2</sup>: 58th and 63rd Divisions.

XIX Corps<sup>3</sup> 17th, 18th, 35th, 50th and 57th Divisions.

OPERATIONS. THE CAMBRAI OPERATIONS (20th November-7th December, 1917).

In this battle, as the composition of the corps was continually changing, the system of allotting divisions to corps, as has been done in previous battles, has not been used and the various formations engaged have been grouped together according to type. On the other hand, corps have been shown with their divisions under the heading Tactical Incidents.

BATTLE OF CAMBRAI, 1917, 20th November-3rd December.

Third Army.<sup>4</sup>

Corps: Cavalry, III, IV, V and VII.

Divisions: 1st Cavalry, 2nd Cavalry, 4th Cavalry, 5th Cavalry,

Guards, 2nd, 3rd, 6th, 12th, 20th, 21st, 29th, 36th, 40th,

47th, 51st, 55th, 56th, 59th, 61st and 62nd.

Total number of divisions engaged: 17 and 4 Cavalry.

<sup>1</sup> The Fifth Army carried out a minor operation on the 22nd October which is not mentioned in the Official Battle List. The following extract from paragraph 59 of Lord Haig's Despatch dated 25th December, 1917, deals with this operation:—

" . . . on 22nd October two successful operations in which we captured over 200 prisoners and gained positions of considerable local importance east of Poelcappelle and within the southern edge of the Houthulst Forest, were undertaken by us . . . "

The Fifth Army troops engaged were:

XIV Corps: 34th and 35th Divisions.

XVIII Corps: 18th Division.

<sup>2</sup> II Corps, Second Army relieved XVIII Corps, Fifth Army on 2nd November, 1917.

<sup>3</sup> XIX Corps relieved the XIV Corps on 29th October, 1917.

<sup>4</sup> The 3rd and 16th Divisions of the VI Corps carried out an important subsidiary attack at Bullecourt on the 20th November, but this action was not within the boundaries of the battle.

Tactical Incidents:

*The Tank Attack, 20th-21st November.*

Cavalry Corps: 1st Cavalry, 2nd Cavalry and 5th Cavalry Divisions.

III Corps: 6th, 12th, 20th and 29th Divisions.

IV Corps: 36th, 51st, 56th and 62nd Divisions.

VII Corps: 55th Division.

*Capture of Bourlon Wood,<sup>1</sup> 23rd-28th November.*

III Corps: 6th, 12th, 20th and 29th Divisions.

IV Corps: 1st Cavalry, 2nd Cavalry, Guards, 2nd, 36th, 40th, 51st, 56th<sup>2</sup> and 62nd Divisions.

VI Corps: 56th<sup>2</sup> Division.

VII Corps: 55th Division.

*The German Counter-Attacks, 30th November-3rd December.*

III Corps: 1st Cavalry, 2nd Cavalry, 4th Cavalry, 5th Cavalry, Guards, 6th, 12th, 20th, 29th, 36th, and 61st Divisions.

IV Corps<sup>3</sup>: 2nd, 47th and 59th Divisions.

V Corps<sup>3</sup>: 2nd, 47th, 51st<sup>4</sup> and 59th Divisions.

VI Corps: 3rd, 51st<sup>4</sup> and 56th Divisions.

VII Corps: 21st and 55th Divisions.

With subsequent—

*Action of Welsh Ridge, 30th December.*

Third Army.

V Corps: 63rd Division.

VII Corps: 9th Division.

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*(Remaining portion of this Record will be published in the November issue of the Journal.)*

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<sup>1</sup> The boundaries for the Capture of the Bourlon Wood are the same as those for the Tank Attack, so all formations on the battlefield qualify for this incident. The fighting that took place actually within Bourlon Wood was carried out by troops of IV Corps.

<sup>2</sup> The 56th Division was transferred from IV Corps to VI Corps on 24th November.

<sup>3</sup> The V Corps relieved the IV Corps on 1st December, 1917, taking over the 2nd, 47th and 59th Divisions in line.

<sup>4</sup> The 51st Division relieved the 56th Division, VI Corps, during night 2/3rd December, and on completion of relief on 3rd December the 51st came under V Corps.

## **SOME NOTES ON THE GERMAN ADVANCE TO THE MARNE, 1914, WITH PARTICULAR REFERENCE TO COMMUNICATIONS.**

By CAPTAIN A. W. G. WILDEY, M.C., R.G.A.

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IN studying the events of 1914, and the "Vormarsch" of the German armies through Belgium and Northern France until they were checked and thrown back from the Marne in the second week of September, one is struck by the absence from the various accounts that have been written of that campaign of any extended reference to the administrative problems that confronted the German supreme command in connection with their plan of invasion and its execution. This is regrettable, because it is certain that many of those problems had their direct influence on the events of that period, and decisions which appear to us at present to have been taken in defiance of sound strategical or tactical principles may in their origin have been forced upon our enemies by administrative exigencies.

Of the various administrative problems which the Germans had to consider, the most important was that of the railway communications of the country in which they intended to move and fight, because upon the carrying capacity of the various railway lines depended the numbers that could be maintained in the front of operations. When one considers the enormous amount of study and thought that must have been expended, and the million and one details of organisation which had to be weighed and considered in perfecting the plan of invasion, it is astonishing that so little has been recorded of the effect that the single factor of the railway communications had on the strategical problems involved. Von Kluck, in recounting his own story of those days, reprints many of his appreciations and operation orders, and much has been written in criticism of them. But he does not give a single administrative order, nor do questions of administration enter into any of his appreciations. The unveiling of the secrets that these orders hold will be an event in military history as interesting to the student as the discovery of the tomb of a long-defunct Egyptian king, with its treasure store of relics of the past, would be to the antiquary. The following notes are an attempt to explain by a study of the railway systems of Northern France and Belgium some of the incidents of the German invasion which seem to be inconsistent with sound strategy, and in particular to throw some further light on the change of direction of Von Kluck's army on 30th August, 1914.

The German plan of invasion intended, if not a double envelopment on the model of a hypothetical Cannæ, at least an envelopment of the

Allied left wing, which was to be driven southwards and eastwards away from its communications with Paris and be eventually forced back and broken against its own right. The Germans hoped to bring the Allies to battle either in Belgium itself or on the general line of the Franco-Belgian frontier, and to gain a decision there. They further expected that, if the Allies did not accept battle on that line, they would retire in such a way as to protect Paris. In calculating the necessary strength of their right, or enveloping, wing consideration had to be given to both these possibilities, and this wing had to be sufficiently strong and so directed as to be able, in the first case, to turn the Allied left, and secondly, if the Allies retired with their left covering, or pivoting on Paris, to be able to mask that fortress and continue the enveloping movement. Further, allowance had to be made for troops which might be required to hold the Belgian, British and any French forces that might be met with to the north-west of Paris. The limiting factors in the calculation of the numbers that could be employed on the right wing were the number, direction and capacity of the railway lines between the Belgo-German frontier and the probable limit of the advance.

In working out their plan, the Germans naturally had to consider the probable grouping of the French armies and, in particular, where the left wing of their main forces would rest. The French plan intended an envelopment of the Metz fortress line, with the Fifth Army on the left. In the actual preliminary grouping of their armies, the left did not extend beyond Rocroi. If we may assume that the Germans did not anticipate at first any great concentration of troops east of that point, then the problem that faced them was the direction to be given to the enveloping wing in order to afford it the greatest freedom of movement, and to enable it to complete the envelopment without in any way hampering the movements of the armies on its left.

A study of the railways leading from the German frontier into Northern France shows that these may be divided into two main groups. South of the Ardennes the main lines run from East to West, with a southerly trend, across the Meuse to the line Troye-Châlons-Rheims. From Epinal to Mézières there are six, namely:—1. Colmar to Epinal; 2. Saarburg to Luneville; 3. Metz to Nancy and Toul; 4. Thionville to Verdun; 5. Treves to Longwy and Montmédy; 6. Coblenz to Mézières.

It will be remembered that the German armies were so placed that the 3rd, 4th, 5th, 6th, 7th armies and the Alsace group would each have one of these lines immediately available. The difficult country of the Ardennes, bare of railway communications of any military value, divided the southern group of railways from the northern, in which there are three lines crossing the German frontier:—(1) Essen to Antwerp; (2) Düsseldorf to Brussels; (3) Cologne to Aix and Liège. The two first of these pass through Holland, and could not be used unless the Germans violated Dutch as well as Belgian neutrality. It is interesting to note that von Schlieffen's original plan did actually contemplate such violation and provided for a march

through the Maastricht salient; but the plan was subsequently altered by Von Moltke as dangerously increasing the number of Germany's enemies.

Thus we see that the two northern armies were limited for their communications to the single line of railway from Cologne to Liège.

An early occupation of Liège was thus of the utmost importance. The short single line of railway from Aix to Liège had to serve two armies and a cavalry corps, comprising 24 divisions and 3 cavalry divisions. For the subsequent communications of this mass two lines of railway branched from Liège, to subdivide later, on reaching the industrial areas of Charleroi and Tournai, into a well-defined system running generally in a north-east and south-westerly direction. A march of not less than 100 miles was necessary before either of these two armies could reach the line of the Franco-Belgian frontier, where it was hoped the first battle might be fought. It was necessary to march on a wide front, not only to be able to attack at once in the greatest possible strength when the Allied flank should be found, but also to simplify the supply question; for the wider the front the greater the number of railheads that could be utilised, and consequently the German M.T. columns would have shorter daily runs to perform. This point was of great importance. The German M.T. at that time was still very imperfect, and was, perhaps, the weakest link in the supply chain. It was essential to conserve the running powers of their M.T. in view of the demands likely to be made on it when the French had been driven back.

Of the two lines which go westward from Liège, one runs north-west to Brussels. The other follows the line of the Meuse in a southerly direction to Namur, where it branches, one branch running *via* Charleroi and Maubeuge to Laon, the other reaching Laon by way of Dinant and Hirson. For a considerable part of their routes these two lines run parallel at an average distance apart of from 20 to 25 miles, and would normally be amply sufficient for the needs of the two wing armies. But there were two other factors which modified their utility. Placed across one of these lines, and completely blocking it as long as it held out, was the fortress of Maubeuge. The Germans could not risk any check in the continuity of their supply arrangements by gambling on Maubeuge falling at the first assault. As regards the other line, through Dinant and Hirson, the possibility had to be considered that either the Fourth or Fifth French Army would extend the French left towards Maubeuge, in which case Von Hausen's army would have to take corresponding ground to its right and would then require that line for its communications. Therefore, in order to ensure that the enveloping wing should have complete freedom of movement the Germans were forced to extend the radius of the sweep through Belgium and to utilise the network of railways running south from Brussels and Louvain for the First Army and for at least part of the Second. A balance had to be struck between the additional demands to be made on the marching powers of the troops and the possible congestion of communications. The call of the communications prevailed.



The Germans advanced through Belgium, and on 24th August, in the face of superior forces, the Allies fell back from the frontier. The Battle of Le Cateau was fought on 26th August and the British Army retreated therefrom in a southerly direction through Ham and La Fère; but it was not followed up by Von Kluck, who, instead, continued his hard marching well to the west of the line of retreat of the British forces, who were thus, fortunately, left alone. Von Kluck, who elsewhere in his book gives his appreciations of many of the situations with which he was faced, is silent upon his reasons for this move. He mentions in reference to his orders for 28th August, that the Allies might be found on the Somme with their left as far west as Amiens. French forces had, indeed, been located on the 27th to the left of the British. But this does not explain his neglect of the latter, for he had ample forces with which to continue the pursuit of them and at the same time secure his flank. It seems much more probable that the direction he took was once again forced on him by his communications. That his line of advance was "in accordance with plan" is to a certain extent suggested by the orders he received from the higher command on 28th August, two days after the battle of Le Cateau. "The First Army, with the Second Cavalry Corps, will march west of the Oise towards the Lower Seine." *He had already taken that direction.* The reason may well have been that the continued advance of the Second Army in a southerly direction would have forced them to use, for their line of communication, the railway Valenciennes-Ribemont-Laon. Maubeuge had not yet fallen and the line through that place was not open; but the communications of the Third Army also converged on Laon from which place only one line proceeded south to Soissons. To give the Second Army freedom, they must be allotted the line Le Cateau-La Fère. For the First Army there was left only the line Valenciennes-Péronne-Montdidier and any lines to the west of it. From Amiens and Montdidier the lines bear to the south-east, in exactly the direction most suitable for an onslaught on the Allied left whether in position on the Aisne or Marne. Von Kluck's famous change of direction took place on 30th August, after passing the line Guiscard-Roye-Amiens, and *coincides exactly with the bend of the railways to the south and south-east.* Is this mere coincidence? Were Von Kluck's thoughts on the 28th, when he contemplated a wheel towards the "left wing of the main French forces retreating in front of the victorious Second and Third Armies," while he persisted in his westerly course, entirely uninfluenced by the prospect of what he would be able to do after the 30th?

As early as the 28th he had thought of the wheel inwards. Von Bülow asked him to wheel on the 30th. He was then at the limit of his westerly movement, but could not complete his wheel in less than three days.

## RADIO-TELEGRAPHY ON THE WEST COAST OF AFRICA IN 1914.

By MAJOR E. R. MACPHERSON, O.B.E., Royal Army Ordnance Corps.

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IT was with many misgivings when I embarked for the "White man's grave" early in 1914, but my doubts were largely overcome by the awe-inspiring sight of the famous "Serra da Leôa" on a bright-hued tropical morning.

Sierra Leone had claimed another victim—not of the fever type, but an enthusiast. My many packages contained my radio instruments, for, in addition to my normal military duties, I had the honour to be asked by the British Association for the Advancement of Science to carry out special observations on "strays," colloquially known as "X's," the bugbear to all wireless work.

It was not long before I got my first experimental station going. The long wave-length of 10,000 metres, which was necessary for observation purposes, necessitated antennæ of no mean dimensions and also instruments of special design.

The erection of the masts called for some ingenuity. Making use of two large cotton trees, over 100 feet high, conveniently sited 150 yards apart, and unlimited native labour, I hoisted a bamboo tripod over 60 feet long into the lofty branches of the said trees, securely anchoring them with the necessary guys, etc. This was duly accomplished by means of a megaphone, much profanity in my best pigeon English, and a week's hard work. My head boy remarked philosophically, in true West African style, whilst gazing at the erections: "He done live, Sah."

My next difficulty was to get a decent "earth." The unyielding red laterite proved useless, so I was driven to a "capacity earth," *i.e.*, wire netting spread on the ground, and it proved most efficient.

My instruments were of my own design, but it is not within the scope of this article to give a detailed description of them. However, I may mention in parenthesis that a description was given of my set in the *Wireless World* for May, 1915.

I soon settled down to routine work, getting splendid results, and carried out my three days per week observations for the Society, to whom I forwarded my monthly reports, which are mentioned in the *Yearbook of Wireless Telegraphy* for 1916.

I was in touch with all stations from Madrid to Olinda in Pernambuco, to say nothing of the stream of shipping that poured in from the South Atlantic seaboard. My first thrill was in the shape of the famous West African tornado, which descended on us suddenly one night. My aerials were carried away, and, for a very good representation of "Dante's Inferno," commend me to several thousand feet of tousled wire going

mad on a tin roof, accompanied by torrential rain and thunder. In earthing my aerial, I received a severe shock, and part of my instrument was burnt out.

However, in a week we were all up again, smiling and hard at work. About this time the monsoon burst, and I had a terrible battle with the relative humidity, which rose as high as 80 per cent. to 84 per cent. at times. In my little hut I had my instruments resting on plate glass, which in turn was insulated from the bench by blocks of paraffin wax, a charcoal brazier in the room trying its best to anæsthetise me. With an outside temperature of 86° F. in the shade, the discomfort can be imagined. Everything was so supersaturated with moisture that to touch the instruments, instantly meant a "short" to earth.

One June morning, at 1 a.m., a strange call came through on a 10,000 metre wave-length. The call was POZ (Nauen) and signing off FAK. As no station in existence at that time was using a wave-length over 5,000 metres, I was considerably puzzled. Little did I know that it was the prelude to what may be aptly termed the "Drama of FAK." In spite of the mysterious station using the letters which were allocated to France, it was obviously of German origin, and was an extremely finely-tuned circuit. For about a fortnight they contented themselves with calling POZ, and signing off as usual FAK. No letterpress was sent yet. At the end of June the note went off considerably, and a small hiatus occurred. I was still puzzled by this call on such a prodigious wave-length; the strength of signals was about 10 (maximum 12), which indicated that the station was in my part of the world.

Unfortunately, directional finding apparatus were not so developed then as now, and one could only conjecture; I placed the station in South America, but how far I was wrong will be seen later.

About the 10th July, 1914, FAK got working again, and apparently more successfully, as letterpress (in code) was being sent, also a number *en clair*, the latter being in very technical German, with most accurate descriptions of how to repair broken cables, etc.

This brings us on to 29th July, 1914. About 1.30 a.m. the same day FAK called POZ as usual, then sent a code message, in which the word "Kolonial Amt" appeared several times. Then there was a pause of half an hour, during which I presumed Nauen was sending, but I could not detect the signals. FAK acknowledged and then started calling "CQ" on the same wave-length, followed by this message in German:—

"To all German Shipping.

"Take best means for your safety against British and French Cruisers"; signing off, FAK.

This was repeated several times and sent very slowly. I may mention that all messages tapped by me were communicated to the proper military authorities.

The capture of Togoland is a matter of history, when the existence of their huge wireless station at Kamina was brought to light. Kamina is 187 miles N. of Lome, in about the 5th parallel, and 1,000 miles due

east of my station. It was destroyed by orders of the German official in charge, and surrendered on the 27th August to our Forces. Up to the time of its destruction, all messages (now sent in code to Berlin) were carefully taken down by me.

From various sources I have gleaned the following data with regard to Kamina (FAK) which may be of interest.

It was part of the German Imperial Wireless Chain, and was the relay station for Windhoek, Tabora and Duala, to Berlin. The primary energy was not less than 300 k.w. The aerials stretched for nearly 4 kilometres, and the four central pylons were over 200 metres high. All the pylons rested on the usual crystal bases.

The transmitters were probably improved Goldschmidt alternators of novel design. It took five years to build, and was only completed in the spring of 1914, and cost over half a million sterling. It was certainly years ahead of any station at that time. It was constructed with the greatest secrecy, and the existence of a station of such magnitude was not suspected until we had actually invaded Togoland.

The importance of that message sent out in clear German on the 29th July can now be realised in view of subsequent events. I was able to link this up rather curiously. In November, 1914, I was placed in charge of the "S.S. Professor Wörmann," a prize of war, for a short while. The wireless operator was on board and I took every opportunity to pump him. I elicited from him that in March, 1914, extra receiving gear was installed in certain German mercantile ships to enable them to tune up to the 10,000 metre wave-length of FAK, and they received strict orders to keep a careful watch for this station.

Thus it appears: Kamina, Togo, was really a "War Station" of enormous power, built under the greatest secrecy. The message on the 29th July, 1914, was undoubtedly inspired from Berlin, and this warning saved Germany many thousand tons of shipping, which fled into neutral ports in the Latin Republics and Las Palmas.

As far as I am able to trace, my station at Sierra Leone was the only station that tapped the famous message of 29th July, except, of course, the German shipping for whom it was intended.

I should be glad to be corrected on this point.

The romance of FAK had scarcely passed, when my humble amateur station developed into a military station of some importance. I was given four native soldiers of the W.I. Regiment, who were able to read up to ten words a minute. By dint of hard training I soon got them up to commercial speed, and from the middle of September, 1914, day and night watches were kept. All messages were carefully logged and reported. My four operators proved themselves most efficient, and during the period of our activity, which ended in May, 1915, over 6,000 messages were dealt with. We were able to follow the movements of all suspicious craft, and the "illicit tenders" of so called neutral ships that did coal running for the German cruisers at large. Our humble station, "MP," was doing its bit at one of the outposts of the Empire.

Before closing, I should like to mention the work of our mobile pack sets. These I had to construct from available material on the spot. They were most useful when trekking through the bush, and they filled the dual purpose of keeping in touch with Headquarters, as well as picking up the daily Havas from Rufisque and Dakar, which were broadcast daily in French. The Havas issued in Paris at 4 p.m., with all the latest war news, was being translated by us at about 8 p.m. the same night. The boon of getting this daily news in the bush can be imagined, especially during a European war.

The natives had nicknamed my radio station the "Ninki-Nunka palaver," or the "Devil's own job," and they regarded it as a very strong Ju-Ju. Needless to say, I took no steps to correct their harmless belief and found it most useful at times. Those who have been in West Africa will appreciate the power of the bush "medicines," used in the abstract sense. My wireless proved a most potent "medicine," and on more than one occasion a dose of "high frequency" to some recalcitrant native was not only harmless, but produced the hardest of all things to get at in Africa—the truth! My "listening in" on my instruments only served to convince the natives that I was talking to this very "Ninki-Nunka" himself, and was able to spring all sorts of Ju-Jus on them. I am sure my immunity from thefts, and the ease with which I got carriers and other needful help in a wild country, were entirely due to my harmless 3-inch coils.

Of the many difficulties that one had to contend with, I think the rains were the worst, especially on the march, when everything got soaked. Yet, I am glad to say that, when on trek, we hardly missed a day in "opening station" and getting in touch with Headquarters, etc. The difficulties were enhanced as all our instruments were home made, with no spares or replacements. Everything had to be improvised, and when I compare the modern thermionic valve set, with all its refinements, amplifying many thousands of times the weakest signals, to our crude crystal receivers (chiefly galena or zincite-tellurium) built into rough packing cases, more often wet than dry, I marvel that we got any results at all. I can well picture the end of a march. The sets outspanned on the mud floor of a mud hut. A flickering candle illuminating the murky atmosphere; our aerials reaching up their gaunt arms into the darkness of the African bush, and a mosquito net protecting us from the deadly inopheles. "MP" we call, giving our code number. No result. At last, after half an hour, we get the welcome "K": we are in touch with civilisation again. We give our daily report, and receive any instructions, etc. Shortly after Dakar comes booming in with that grunty note of his. Anyhow he is very welcome, as his Havas informs us of French activity in the Artois and a raid at Ypres. We retire feeling absolutely bucked, as if we had just read the tape at the club, and well might we be, considering our remote position.

During the Hamattan, that peculiarly dry and relatively cold wind that blows off the Sahara, we had many curious results. The atmospherics



absolutely disappeared and we got freak ranges, reading FL (Paris) one morning quite clearly at 4 a.m. at Headquarters, on the big aerials with a very sensitive galena detector.

As West Africa is bound to develop into the hunter's Mecca, I would strongly urge all prospective sportsmen to provide themselves with a small modern valve set. This is not only useful for setting chronometers, etc., but also for receiving the weather reports which are being broadcasted from the various African stations. If only we had had these luxuries in 1914!

At the same time we had the honour of being pioneers, and our School, though Spartan in its methods, proved to be the best tutor after all.

Radio-telegraphy and telephony are becoming the mere common-places of life now, and our humble work of a decade ago appears to be in the Middle Ages, so rapid has been the evolution and development of one of the greatest sciences of the age.



## THE BURDEN OF BEWAQFI BAZAAR.

(With apologies to "Backsight Forethought.")

By "ASSAYE LINES."

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"They sit at the Feet—they hear the Word—they see how truly  
the Promise runs.

They have cast their burden upon the Lord, and—the Lord He  
lays it on Martha's sons."

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### PROLOGUE.

ONE evening after a long and tiring day, ending in a desultory conversation after dinner on the rioting in the bazaar in Bangalore in November of last year, I left the mess early and was soon in bed and asleep. The hot weather combined with fatigue and the last topic of conversation which must have impressed itself on my already drowsy mind, is responsible for the following nightmare consisting of a series of dreams. To make the sequence of the dreams intelligible it is necessary to explain that, though the scene of each vision was the same, yet I had no recollection whatsoever of the place or previous circumstances. One thing only was carried on from dream to dream, and that was the vivid memory of the general lessons previously learnt.

The whole series of dreams, however, remained in my memory when I awoke.

### FIRST DREAM.

"We saw the red blood run;  
An' so we all was murderers that started out in fun."

As Orderly Officer of the week I had just turned out the guard and was walking back to my bungalow to change, when an orderly on a bicycle dismounted beside me and said that the Adjutant wanted to see the Orderly Officer at once. I turned back, thinking of all the sins I might have committed in the past twenty-four hours, walked into the orderly room, and saluted. The Adjutant was busy, but he looked up from his desk at once and said quickly:—

"The Brigade Major has just rung up on the telephone to say that there is some sort of a row going on in Bewaqufi Bazaar. The inlying picquet has to turn out and go down there, so get away as soon as you can. Report to Headquarters on the telephone when you get to Commercial Street police station, and if you are not back by seven o'clock I'll send the men's food there to wait for them."

I left the orderly room and ran round to the Quarter Guard, where the inlying picquet was already falling in. It did not take long to issue the pouch ammunition and in a few minutes we were on our way down Artillery Arcade, bayonets fixed and shining in the sun, my hundred men stepping out in great form, but with a slightly puzzled officer at their head.

I had a vague idea that, whatever action an officer in command of troops took during civil disturbances, he was sure to be hauled over the coals for it afterwards. Either a magistrate had to read a mysterious Riot Act or else the crowd had to be dispersed before he could do so. However, I was not sure that there was a Riot Act in India, so there was not much use in worrying about it. I was rather doubtful, too, as to how a crowd should be dispersed without opening fire. It seemed as if it might depend upon the crowd, and I at last cheered myself by the thought that there was probably only a mild sort of row going on, which would cease at once on the arrival of troops.

When we turned into Commercial Street, however, I saw that something more serious than a bazaar row was in progress: smoke was rising from the direction of the police station and a crowd of people were standing at the end of the street. Something was lying in the middle of the road and, as we came nearer and the crowd surged away from us, we could see that the police station was burning fiercely and that the bodies of two policemen, cut to pieces and barely recognisable, were lying outside. The crowd seemed quiet, though black looks and muttered threats were not wanting; from the direction of the bazaar came a confused and dreadful noise, the shouting of men, the roar of a mob, mingled as I imagined with shots and the shrieks of hunted men. What was I to do? . . . The burning of the police station had cut me off from outside help, the bodies on the road were witnesses to the seriousness of the situation, and the crowd in front were blocking my way to the bazaar. I was considering whether I should try to find a way round to the bazaar when I heard the welcome sound of a motor-car coming up behind me. I turned quickly, eager to share my responsibility, and as the car stopped I saw two men get out and run towards me. One of them was a police officer, the other an Indian in a long black coat, and as they came closer the policeman shouted:—

"Broadway police station has been burnt and the mob is playing hell in the bazaar. You must take charge of the situation—the Sub-Magistrate here will give you written orders to that effect, and until we can get some more troops sent down you must do the best you can."

Although this did not seem to make the situation much clearer, the "written orders" had a comforting sound about them and I decided that I must get on to the bazaar at once. The crowd was still packed tight in the street in front, but, having made up my mind to get through, I gave orders to my men to fire two rounds over their heads. The result was most satisfactory; as soon as the first round was fired the crowd seemed to melt in front of us, and in a few minutes the street, though

strewn with caps and sticks, was deserted. We doubled quickly along Commercial Street, turned to the right at the end, and after a few hundred yards arrived in the open square in front of Bewaqufi Bazaar.

The square was packed with people, a huge crowd of men, women and children were standing there, excited and shouting, many with sticks in their hands; from the bazaar itself came shouts, cries, a pillar of smoke and the noise of breaking doors and tumbling bricks. We could get no farther and were met by a shower of stones from a section of the crowd; a man, raised on the shoulders of others and conspicuous above his neighbours, shouted: "Have no fear, brothers, they dare not fire on us; the order is to shoot in the air." More stones, cries and yells from the mob plundering the bazaar, and I made up my mind to act quickly. "At the crowd in front, five rounds, rapid fire." The rattle of rapid fire, screams of women and children, and smoke and dust and blood; the mob made a wild rush to escape, fighting each other in their madness; the weak were trampled underfoot and bones that the bullets had missed were broken and crushed. The square was covered with bodies piled one on top of the other, tossing and moaning. The men ceased fire, appalled at the sight of the charnel house we had created. I felt sick and faint.

When I had pulled myself together I was under arrest and the Brigade Major, blasphemous and incoherent, was stamping in front of me. I was bundled into a motor-car and driven back to barracks, oppressed by the memory of the square after the firing had ceased even more than by the thought of the future. I had gathered from the Brigade Major's remarks that our first volley over the heads of the crowd had killed two passers-by and wounded the General's chauffeur as he was driving along the high ground on the way to the riot, and it was small comfort to me to reflect on the following four lessons which kept running through my head:—

1. I had only myself to blame for having had to take on the job with only the haziest idea of my duties or of its difficulties. Although reading a somewhat unintelligible book might not have prevented me from making a mess of things, I could at least have avoided the obvious mistakes, and my failure would have been due to lack of experience and not to negligence.

2. Firing over the heads of the crowd in Commercial Street was a mistake. We had killed and wounded innocent people far away from the riot, and had encouraged the mob to believe that they would not be fired on.

"The military authorities say, 'We are here, and if we use our firearms it is to kill.' . . . If the mob get the impression we are there with only blank cartridges the result will be bloodshed galore."

3. Opening fire on the crowd in Bewaqufi Square was a crime. By acting wildly on the spur of the moment, we had shot down numbers of innocent people and allowed the guilty to escape.

"A soldier for the purpose of establishing civil order is only a civilian armed in a particular manner. He cannot because he is a soldier excuse himself if, without necessity, he takes human life."

"Care must be taken not to fire on persons separated from the crowd who do not appear to be acting with it or inciting it."

4. If it had not been for our unfortunate volley in Commercial Street, a warning to the crowd in the square might have been enough to clear the way and let us get at the real "badmashes." At least, those peaceably inclined, and the women and children, would have had a chance to escape.

"Should it be necessary for the military to use extreme measures they should, whenever possible, give sufficient warning of their intentions."

#### SECOND DREAM.

"To do nothing is to do something definitely wrong."

Again I found myself attending outside the smouldering ruins of the police station with my "written orders" in my hand, only this time I had something to go on. Again I decided that we must make our way to Bewaqufi Square, but this time I determined to find a way round and leave the mob in possession of the end of Commercial Street. I gave orders to the column to retire and, followed closely by the crowd, we turned into Silver Street; the road was narrow and blocked by bullock bandies and after a few yards we turned again, guided by the noise from the bazaar. This time we entered an even narrower lane which shortly came to a dead end, and when we turned to make our way back we found that we were shut in by a mass of men, women and children.

The crowd appeared bolder than when last we faced it, and one or two stones were thrown. It was obvious that we could not stay where we were, and I gave orders to the men to push through the crowd, keeping together and using the butts of their rifles where necessary; in a few minutes we were back in Silver Street and the mob, sobered by a few broken heads, was pressing back in front of us. With the help of the Sub-Magistrate we found the right road and, after a short delay, when we again had to force our way, we arrived in the square.

The state of affairs in the square has already been described, although, as was explained before, at the time I remembered nothing of my previous dream. This time I decided to push through the crowd towards what appeared to be the root of the trouble, and with difficulty we reached the iron railings of the bazaar, where the rioters were at once seen to be of a different temper. There were men carrying sticks and stones and blackened with smoke, and evil-looking women, haggard and dirty; some were carrying in their arms bundles of cloth, others were making away with brass pots and bags of rice. I told the Sub-Magistrate, who was sticking close to my shoulder, to warn the crowd that we were about



to open fire; but his voice, even when it could be heard above the uproar drew no attention. I hesitated, unwilling to commit myself, and finally ordered my men to seize those members of the crowd who were carrying what was obviously loot. As a number of them moved forward to do so, they were quickly surrounded by the angry mob so that it looked as if we were about to be broken up into small parties. I dared not open fire for fear of injuring my own men, and it was only after some time and by a liberal use of the rifle butt that we got together again. When I was able to look round I saw that the fires were spreading and that the disturbance seemed to be extending down Leather Lane. I could get no help from the Sub-Magistrate, whose only remark, repeated over and over again, was: "You are in control of the situation." The control I had over the situation was rather difficult to see, but, knowing that I alone would be held responsible, I still hesitated about opening fire.

If I drove the rioters back from Leather Lane, it would probably only mean that the trouble would spread in another direction; my attempt at stopping the looting by seizing the ring-leaders had come to nothing and had only emboldened the crowd; to stop where we were and do nothing was obviously wrong, and yet I could not summon up the courage to open fire. As I debated with myself as to what I should do next, while my men looked at me uneasily and fidgeted with their rifles, I suddenly realised that the crowd in the square was thinning. There was no doubt about it; I saw a distinct movement towards Leather Lane, and as I watched the movement increased until the crowd had dwindled to scattered groups, mostly of women and children, uneasy and frightened. I saw then that Bewaqufi Square was gutted and that the centre of attraction had shifted, that the whole bazaar was aflame and that we had failed. Even as I realised what had happened a column of infantry entered the square. The Adjutant of my battalion was at its head and, before I had time to think of excuses, I had been relieved of my command and the column was pouring down Leather Lane in pursuit. As I followed in rear I pondered over the following lessons which I had learnt:—

1. I should have been prepared to make up my mind at once and to act. As commander of a body of troops, I had certain privileges and also certain responsibilities—I could not accept the one and deny the other.

"An officer will not perform his duty who, from fear of responsibility, lies by and allows outrages to be committed which it is in his power to check."

2. I had not been able to bring myself to fire upon the rioters with my whole command of one hundred men, and my difficulty had been that it was all or nothing. I should have been ready to order any proportion of my force to open fire, and should have made arrangements beforehand to enable me to do so.

"The force used must always be moderated and proportioned to the circumstances of the case and to the end to be attained."

3. We had wasted a lot of time in getting to Bewaqufi Bazaar and had allowed the disturbances to get a more firm hold. A crowd is a collection of individuals, a company of infantry is something more, and God is not always on the side of the big battalions.

### THIRD DREAM.

"A whiff of grapeshot."

Once again I was standing outside Commercial Street police station under precisely similar conditions, but this time I had told my party off into sections of ten men each and had placed an N.C.O. in charge of each section; the men had been warned that they were on no account to open fire unless they were personally ordered to do so by their section commander or by me; the N.C.O.s had been warned that this order was to come from me alone. With my various lessons fixed in my mind I felt confident of the future, and ordered the column to advance towards Bewaqufi Square.

With the help of the men's rifle butts we pushed our way slowly through the people until we reached the end of the street where the crowd was densest. Our progress became slower and slower and the attitude of the mob more threatening. Suddenly I heard a short volley, four or five shots fired behind me and at once the pressure of the crowd decreased. One of my section commanders hurried forward with a report that three of the rioters, armed with swords, had attacked his section and slightly wounded one man, and that four of his men had fired on them. It appeared to me that the men had acted rightly in knowing when to disobey an order and, having told the section commander so, I sent him back to his section.

In a few minutes we reached the square and halted in order to find out what was going on. The crowd surrounding us seemed to be harmless, and the noise and smoke coming from Bewaqufi Bazaar showed that the dangerous part of the mob was there. Disregarding a few scattered showers of stones which were thrown by the crowd, we pushed on and reached the railings which divided the market from the square. The demeanour of the crowd and the bundles of loot which many of them were carrying proved them to be active sharers in the riot; as we watched I saw doors broken down and men and women pour into the houses and shops in search of plunder. Having told the Sub-Magistrate to warn the crowd that we were about to open fire and that we would use ball ammunition, I called up two of my section commanders and told them to order the men of their sections by name to fire one round at the crowd in front of them when I gave the signal, and to be prepared to continue firing if the signal were repeated. No attention whatever was paid to the Sub-Magistrate, and I opened fire. One round was enough.

The crowd, dropping sticks and stones, bolted like rabbits to their burrows, knocking each other over and scattering rice and grain and bundles of cloth as they ran. In a very short time the square was cleared and, except for the bodies lying on the ground in front of us, not a rioter was in sight.

Our volley had killed three men and wounded another dozen, and we commenced work picking up the wounded and attending to them as best we could; I detailed parties to extinguish the fires which were burning in parts of the bazaar, while others searched the ruins in case any of those injured by the rioters were lying there. While we were engaged in this work, a motor-car rolled into the square and an exceedingly affable Staff Officer descended from it. I walked towards him and saluted smartly. . . . A raucous voice said, close to my ear:—

"Five o'clock, Sir. I've put out your old breeches and your gumboots."

It was not yet dawn and raining hard.



## THE SEA POWER OF GERMANY AND THE TEACHING OF MAHAN.

By BREVET LIEUT.-COLONEL R. H. BEADON,  
C.B.E., R.A.S.C., *p.s.c.*

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"The German people did not understand the Sea. In the hour of its destiny it did not use its fleet."

VON TIRPITZ.

AT first thought it might appear an unfruitful proceeding to re-explore a field that was set out some thirty-five years ago in the shape of a book which was written to interpret the meaning of sea power. For the existing conditions of naval warfare are so evidently different from those obtaining at the period when Mahan published "The Influence of Sea Power upon History," that it might well be expected that the doctrine laid down therein could only possess a very limited application to-day. Apart from the scientific progress in armament as far as the surface craft are concerned, the two new factors that exist in the submarine and the aeroplane have profoundly modified tactical and even strategical processes. Developments in these inventions and considerations of their use in practice must necessarily dominate naval thought and exercise the faculties of the engineers and scientists concerned. The technicalities involved place them beyond the reach of the ordinary layman. With the principles of maritime war it is otherwise. And it is just these principles that the writer, "who made the achievements of our Sailors his theme and their consequences his doctrine," has laid down in all their fulness. It would seem useful to test them in the light of the World War in so far as the sea power of Germany was concerned. Here is furnished an instance of almost complete ineffectiveness on the part of a strong and efficient fleet.

For this country there can be few more valuable lessons than those which the struggle for maritime supremacy have to offer. The dominion of the seas, still the prime controlling element in the destinies of nations, is and must remain for many decades to come vital to the existence of England and therefore to the whole scattered British Commonwealth. That the national instinct is alive to this fact admits of little doubt, and even in times of peace, when economy cries almost drown all others, it makes itself felt in no uncertain manner. Questions of maritime supremacy do in fact interest the public and the importance of maintaining this interest can scarcely be over-emphasised.

To sustain this general argument the interest aroused by the works of Admiral Mahan may be cited. The better known of these have been so widely read, that they may fairly be said to be part and parcel of the education of most moderately informed Englishmen; and such

popularity in the case of serious professional books is unusual and gratifying. It is a matter for profound regret that their illustrious author died near the beginning of that struggle which was to put all his theories to the supreme test. The naval lessons of the war, and the deductions he might have drawn therefrom and presented with his own matchless logic and lucidity, would have been of incalculable worth.

There is no one to take his place, but it must remain for his disciples to carry on the torch that illumined his faith and see that the truths he hammered out from the experience of the ages are not dimmed by new speculations and doctrines that new conditions may evolve. One day a successor to Mahan may arise who will be able to carry on the work where he laid it down and to indicate with equal clearness and conviction how the old truths will apply to the living and continuous development of naval power. Until that time arrives there can be few more useful exercises than to study Mahan's teachings in relation to the Great War and seek to ascertain in how far they were borne out. The subject is of special interest at the present time when naval policies are to a great extent in the melting pot as a result of the Washington Conference in 1921, which did not indeed fail to re-affirm once more the cardinal influence of sea policy in the direction of the life of the world and the relationship of nations one to another.

Again, there has been no time to assimilate the considerable number of works that have appeared dealing with the war on its naval side and to assess their value without the prejudice and partiality that were only human while the struggle was still in progress, or so close that its echoes had scarcely died away.

From the English standpoint many lessons have been adduced that may be expected to bear fruit in the future. On the enemy side there has been comparatively little light—at any rate in so far as those countries outside Germany are concerned. But Germany is the only one of real importance, and it has now been possible to study various works by her leading sailors as well as to hear verbally from those who took important parts on her side.

In August, 1914, the German Fleet was a very good second to that of Great Britain. Lord Jellicoe, in giving the figures of the respective fleets, has elaborated them by indicating certain specific advantages the enemy enjoyed which actually makes the comparison a good deal more favourable to the latter than an actual counting of heads would show.<sup>1</sup>

<sup>1</sup> Comparison of Grand Fleet and High Seas Fleet, August 4, 1914.

		Dreadnoughts.	Pre-Dreadnoughts.	Battle Cruisers.	Light Cruisers.	Destroyers.
British	...	20	8	4	12	42½
German	...	13	16	3	15	88

—p. 31, "The Grand Fleet."

See also pp. 32, 309, 314, constructional advantages of the German over the British Dreadnoughts.

"The Grand Fleet," by Lord Jellicoe.



In view of the not unfavourable comparison it would seem to require some explanation as to why greater results were not obtained, and this is what it is proposed to examine here rather in the light of the principles on which German sea power was used than by any detailed analysis of this or that specific operation.

Three general courses were open to the German Fleet at the outset of the war :—

1. To seek out the British Fleet with a view to giving decisive battle.
2. To attempt by means of guerilla operations to so weaken the British Fleet in order that an approximate equality might be obtained that might lead to hopes of ultimate success in battle.
3. To maintain the fleet in an attitude of watchful expectancy which should at the same time
  - (a) ensure the security of the German coasts,
  - (b) maintain the fleet "in being" as a perpetual menace to England.

It was the third of these courses, combined to a very limited extent with the second, that was immediately adopted.

In the war orders that were issued to the Commander-in-Chief of the High Seas Fleet the task before him was framed as follows: "The object of the operations must be to damage the English Fleet by offensive raids against the forces engaged in watching and blockading the German Bight as well as by minelaying on the British coast and submarine attack whenever possible. After an equality of strength has been realised as the result of these operations and all our forces have been got ready and concentrated, an attempt will be made by our fleet to seek battle under circumstances unfavourable to the enemy."

It was added that "if a favourable occasion presented itself for a battle beforehand, it must be exploited."

In conformity with these instructions Admiral Irgenohl's order to the fleet in August, 1914, laid down that they were not going to oblige the enemy by coming out with their battleships to his coast, but that, on the contrary, the enemy must come to them.

The strategic reasons for keeping back the fleet were communicated by the Chief of the Naval Staff as follows :—

"The existence of our fleet ready to strike at any moment has hitherto kept the enemy away from the North Sea and the Baltic coasts and made it possible to resume trade with neutral countries in the Baltic. The Fleet has thus taken over the protection of the coasts, and troops available for that purpose are now available for use in the field. Even after a successful battle the ascendancy of the fleet under the numerical superiority of the enemy would give way and under pressure of the enemy fleet the attitude of neutrals would be prejudicially influenced. *The fleet must therefore, be held back and avoid actions that might lead to heavy losses.*"

Such policy could hardly be described in any other way than lacking in enterprise and offensive spirit. Naturally enough, German sources seek to combat such terms. It is denied that inclination to battle was wanting in the German Fleet. But it is contended that what held it back was the reflection on the part of the High Command that the whereabouts of the enemy main forces was unknown and that it was questionable whether they could be found in the time disposable, *i.e.*, two days and two nights—the capacity of the Destroyers. Losses from submarines were also feared, for which there would be no compensation in the way of victory if the English Fleet were not found.

Such explanation is anything but convincing, for, even if the accuracy of the reasoning is admitted, it still remains that energy and activity have been jettisoned to make room for what the Germans have termed "watchful expectancy." And "watchful expectancy," while it may sound very well, means nothing positive at all, but rather suggests a Micawber-like attitude.

French naval opinion especially has not been sparing of criticism of the passive strategy adopted, and points out, quite truly, that such caution, not to say inaction, was surprising "in a navy organised and commanded in its origin by Prussian soldiers and, therefore, brought up in the cult of a doctrine in which unrelenting energy plays so large a part."

There were not wanting authorities on the German side to dissent from the policy adopted, and most prominent and influential among these was the Naval Secretary of State, Von Tirpitz, who urged with all the weight of his prestige and unequalled services to the navy that risks should not be shirked in order to try and force a decision. "Our fleet gains nothing by postponing the battle," he writes on 29th August, 1914. Later, in January, 1915: "the fleet must go out. In favourable circumstances it may force a decision." On September 16th, 1914, in a letter to the Chief of the Naval Staff his case was elaborated somewhat as follows. Firstly, that the equalisation of forces could not be achieved by guerilla warfare. Secondly, that the aim of all work for twenty years had been battle. Thirdly, that the best chances were within a few weeks of the declaration of war. Fourthly, that as time goes on chances will grow less as the English Fleet receives a greater proportionate increase. Fifthly, that by inaction the *morale* of the crews is bound to degenerate. Sixthly, that the history of the world shows that smaller fleets have in action more often defeated larger ones than not. And lastly, that there was no object in keeping the fleet intact till peace came.

In urging this point of view Von Tirpitz did not commit himself to the general opinion that battle must be sought in any case and in any position. In his own words, he desired that "the fleet should create by continual activity a situation that would compel the English to draw nearer to us." But, in his capacity as Naval Secretary of State the Grand Admiral had no responsibility for naval operations. It was natural enough that the man who created the German Fleet should wish to

command it in the hour of trial. Yet, even had he commanded, the desire for battle is a long step from being able to impose it. And the German navy suffered under a disability, often overlooked, which lay in the organisation of its higher direction. The supreme control was vested in the Emperor. Von Tirpitz was Naval Secretary of State, a post corresponding to that of the British First Lord of the Admiralty. Admiral Von Pohl was Chief of the Naval Staff, while with the Kaiser was a naval "chef de Cabinet" in the shape of Admiral Von Müller. Nor was the Emperor a mere titular head issuing instructions on the advice of the Chief of the Staff. In fact, the Commander-in-Chief, Von Pohl, was little more than a servant and a very obedient one. The naval "chef de Cabinet," a highly placed officer, was naturally in a position to exercise a good deal of influence. On purely naval opinions then the Emperor was in danger of being pulled in two different directions, and the confusion was still more accentuated by the political issues and considerations which were bound to influence the Supreme Commander who was at the same time the head of the State. As it turned out, Von Pohl never resisted political pressure and so the naval staff never really fulfilled any independent functions as such. Added to all this was the fact that Germany's most distinguished sailor was head of the Admiralty and would have been scarcely human had he refrained from urging the very decided opinions he held as regards the conduct of the naval war which lay outside his province. This state of affairs was never rectified until the middle of 1918, when it was too late. The disputes which arose very early in the war were scotched by orders issued by the Emperor on his own responsibility, and which orders were perfectly consistent with the ideas previously expressed by him. That is, that the fleet must show patience and not risk engagement with superior forces. The idea of obtaining an equilibrium by "partial" offensives and by submarine action was advocated, but only under the most favourable circumstances should any further action be courted. Certain lip service was paid to "battle" in the order of 30th August, 1914. "His Majesty recommends a prudent reserve in face of the superior enemy forces in such a way that the final goal of our operations—that is to say, the concentrations of all our forces for the decisive battle—should not be compromised by premature losses." With such an inspiration, and it remained more or less consistent throughout the whole course of the war, it becomes comprehensible how the German battle fleet effected so little. The moral driving force that lay in the will to contest with England the mastery of the seas was absent. Ambitions were limited to injuring, hindering and hampering the operation of that great silent Power which was strangling Germany to death, instead of the determination to get to grips with it or perish in the attempt.

Mahan quotes the French Admiral Grivel as regards the action of the French Fleet in the Seven Years' War as follows:—

"If two maritime Powers are at strife the one that has fewest ships must always avoid doubtful engagements; it must run only

those risks necessary for carrying out its missions, avoid action by manœuvring, or, at worst, if forced to engage, assure itself of favourable conditions."

—an utterance scarcely different in its tenour to the instructions given by Wilhelm II. to his Navy. On Grivel's utterance the American sailor comments :—" It may be questioned whether a sea power worthy of the name can thus be secured. Logically, it follows from the position assumed that combats between equal forces are to be discouraged because the loss to you is greater than the loss to your opponent. . . . But the next inevitable step is the argument that it is better not to meet the enemy. . . . Such a course cannot be followed for years without affecting the spirit and tone of the officers charged with it."

In fairness it may be conceded that from the time Admiral Von Scheer took command of the High Seas Fleet, in January, 1916, efforts towards an increased activity were made ; but such were of a very tentative nature, lacking conviction, and not attempting to envisage any great or decisive operation. A contemplated raid by battle-cruisers on Sunderland, backed up by the battle fleet, led to the action off Jutland ; but, despite the initial successes here, no desire was evinced thenceforth for any repetition of a general engagement, much less an engagement to be fought *à l'outrance*. By the end of October, 1918, the desperate state of Germany did lead to an order to bring out the fleet and hazard all in a battle to be fought in the Channel. The *morale* of the crews did not, however, allow this eleventh hour decision to be carried into effect.

Admiral Von Scheer admits in his book that a battle should have been hazarded earlier, and, without seeming to appear wise after the event, it is difficult to realise why it was not more fully appreciated how much more was stood to be gained by a victory of the High Seas Fleet than could possibly be lost by a defeat in which even a large number of capital ships might have been sunk.

Having failed in its function of keeping the seas open for its commerce, the German Navy made no resolute effort to re-open communications for its shipping by challenging the Power that had swept that shipping from the seas. Rather it relapsed into a timid opportunism, and not a very vigilant or intelligent opportunism at that, unless the measure of an unlimited submarine warfare may be termed intelligent, bringing-as it did the gravest political consequences in its train. On 1st February, 1917, the die was cast and an unrestricted commerce-destroying campaign was decided upon, after long and anxious deliberations. Such was the faith placed in this course of action that it definitely established itself as the chief hope of bringing the war to a successful conclusion. It may be wondered whether any one of the high authorities who were responsible for the decision happened to ponder at the time what Mahan held to be the teaching of history as regards the commerce-destroying form of maritime warfare. Possibly the advent of the submarine might have been considered to have rendered obsolete the naval historian's

ideas on its fallacy "as a main reliance in war." Yet Mahan's words are just as apposite to-day as when they were written:—

"The harassment and distress caused to a country by serious interference with its commerce will be conceded by all. It is doubtless a most important secondary operation of naval war and is not likely to be abandoned till war itself shall cease; but, regarded as a primary and fundamental measure, sufficient in itself to crush an enemy, it is probably a delusion and a most dangerous delusion when represented in the fascinating garb of cheapness to the representatives of a people. Especially is it misleading when the nation against whom it is directed possesses, as Great Britain did and does, the two requisites of a strong sea power—a widespread healthy commerce and a powerful navy. . . . *Only by military command of the sea, by prolonged control of the strategic centres of commerce, can such an attack be fatal and such control can be wrung from a powerful navy only by fighting and overcoming it.*"

Certain writers, and not only German writers, have defended the policy adopted on the grounds that the German Navy maintained itself as a "fleet in being" for four and a half years, and therefore as a constant menace; and that, in addition, it kept the unchallenged command of the Baltic, and stood behind the submarine campaign.

Truly enough in August, 1914, the High Seas Fleet was a menace to the sea power of Great Britain. But as time went on that menace became progressively less and less as its will to the offensive weakened and the loss of the initiative was acquiesced in.

The command of the Baltic was useful, but in no sense decisive even in so far as the war against Russia was concerned. Nor did it require capital ships to keep the British Grand Fleet from these waters where there was no object to be attained which could be commensurate to the risks involved from an active defence by mines, light craft and submarines.

It may be admitted that the High Seas Fleet stood behind the submarine campaign, but, when all the factors involved are considered, it is believed that, dangerous as it was, that campaign could never have been decisive of itself.

The Emperor's policy in relation to his navy calls to mind an irresistible parallel in that of Napoleon after the battle of Trafalgar. The activity of the French dockyards was increased and ships were continually being laid down and added to the fleet. Powerful squadrons were assembled in Brest, Toulon and in the Scheldt. But to the end of the Empire Napoleon refused to give his navy, "full of ardour and self-reliance" as a French historian has written, "an opportunity to measure its strength with the enemy. . . . he kept our armed ships only to oblige our enemies to blockade, whose enormous cost must end by exhausting their finances."



On the fall of the empire in 1814, France had over one hundred ships of the line and fifty-five frigates. After Jutland, the already powerful German Fleet was increased by ships of the line, while the "Hindenburg" replaced the "Lützow" in the battle-cruiser squadron. But the substantial addition to its fighting power seemed to have brought with it no more aggressive tendencies.

"The necessity of a navy in the restricted sense of the word," writes Mahan, "springs from the existence of a peaceful shipping and disappears with it, except in the case of a nation which has aggressive tendencies and keeps up a navy as a branch of its military establishment."

Many will be found to contend that the rise of the German Navy can only be covered under this last category in that it was a thing of unnatural and artificial growth. But was this altogether so? Germany did possess in 1914 a very considerable mercantile fleet and an increasingly extensive world trade. She had made a start as a colonising power in Africa, Australasia and even in Asia. It would not be difficult to make out a case for the necessity of a war fleet—at all events the German people were convinced or claimed to be convinced of its importance. When the "peaceful shipping" which that fleet existed to protect disappeared from the ocean on the outbreak of war, and was never able to take to it again while hostilities lasted, the war fleet by default was bound to adopt the second rôle. In becoming merely a branch of the military establishment, it ceased to be a navy in the real meaning of the word. Indeed, its higher direction practically lay within the sphere of the Supreme Army Command, whose influence was one of the most powerful factors in condemning it to a commerce-destroying warfare.

Mahan taught that a navy unwilling to accept the chances of battle cannot hope to justify its existence, and, secondly, that to rely on a commerce-destroying form of warfare to give decisive results was a delusion.

And certainly the record of the German Navy in the Great War would appear to be in confirmation of that teaching.

In justice it must be conceded that the German Fleet was strategically badly placed in that, as far as the North Sea was concerned, it had only one point of exit from its bases—that is, the corner that faced the Elbe and the Weser. It was only from this point that the "High Seas Fleet" could emerge for an attack. "The sides of the 'Wet Triangle,' the apex of which can be imagined at Heligoland, ended at Sylt in the north, and the mouth of the Ems was in Dutch and therefore neutral territory. All movements of ships could, therefore, be observed. . . . The channel at Sylt was navigable solely for destroyers and light cruisers and then only in favourable conditions of wind and tide."

The geographical situation of Germany did not, in fact, lend itself to easy access to the high seas, which condition was accentuated by the physical conformation of her seaboard. In a discussion on the elements of sea power Mahan has indicated the two above mentioned considerations as among the principal affecting the development of any nation in the direction of the sea. And, fundamentally, they affected the German Navy from the hour of its birth. For strategic ideas necessarily governed

the method of ship construction in that speed and radius of action were relegated to a secondary importance as compared with defensive power.

Even had the British Fleet not existed, German terms such as "High Seas Fleet," "Admiralty of the Atlantic," were meaningless for a navy whose ships were constructed for action limited to the North Sea.

German mentality is, in fact, very difficult to understand when considered in the light of war at sea. Von Scheer writes that at the beginning of the war "there was only one opinion among us about the attitude of the English Fleet. We were convinced that it would seek out and attack our Fleet the minute it showed itself and wherever it was. This could be accepted as certain from all the lessons of English Naval history. . . . we had never regarded it as possible that the English Fleet would be held back from battle and as 'a fleet in being' be restricted solely to blockading us from a distance, thereby itself running no risks." The German claim is that these methods by the English Fleet were based on "the most anxious efforts to avoid suffering any real injury" and that the High Seas Fleet did succeed in making the war at sea an effective menace to England.

Now it is rash, to say the least of it, to assume that the enemy will do what you wish him to do—or at any rate what you are prepared for him to do, which amounts to very much the same thing. Yet the Germans seemed to have hugged this delusion for long.

They forget that up to the time of Jutland their navy had virtually accepted defeat and that without fighting. The fighting at Jutland only confirmed that defeat. The British Fleet did not exist for the purpose of fighting the German Fleet on a battleground and at a time of the latter's own choosing and purely for the sake of fighting. It existed for the purpose of obtaining and maintaining command of the seas. And in so doing it fulfilled its *rôle*.

For a people who have proved beyond all others that, in order to win in war, any means are justifiable, the German writers on the naval side have shown a strange inconsistency in imputing to their enemies an "inglorious conduct" of the war at sea. "There will always be the sting that he was not victorious in battle and that his method of waging war is one that must recoil upon his own head."

The refutation of such a gibe would lead beyond the scope of the subject dealt with here and perhaps in any case would serve no useful purpose. But one cannot refrain from calling to mind what Mahan wrote on the "silent" and "awful" workings of sea power and how they are exerted for the most part behind the scenes.

And one can, therefore, cordially subscribe to the words in which an American naval officer still serving has summed up the Great War at Sea. "Naval events in this war, therefore, supplied corroborative evidence as to inductions grounded in the experience of past wars, thus clarifying rather than confusing the principles already more or less firmly established. Naval power dominated the military situation. The armies of the belligerent denied the sea were overcome by the armies fed, equipped, and supported by means of ocean traffic."

## GALLIPOLI VIEWED FROM THE TURKISH SIDE.

By G. G. A. E.

### PART I.—HELLES AND ANZAC.

IN June, 1913, Liman von Sanders, at that time one of the Senior Divisional Commanders of the German Army and actually commanding the 22nd Division in Cassel, was, as he tells us in his most interesting book "Five Years in Turkey," offered the appointment of Head of the German Military Mission to Turkey.

This book as a whole strikes one as being written with much impartiality and restraint, and with marked fairness towards opponents and enemies. The impression left upon the reader is that General von Sanders, besides being a good soldier, is a gentleman.

Liman von Sanders says that the Military Mission occupied itself in no way with politics, and he was specially warned by the Kaiser, before he left Germany, not to bother himself as to whether the Young Turks or the Old Turks were in power, and that he should strive to eliminate politics from the Turkish Officer Corps.

The All Highest also enjoined him to cultivate good relations with Admiral Limpus, in charge of the British Naval Mission.

Liman von Sanders arrived in Constantinople on 14th December, 1913, bringing forty-two officers with him.

He states that he was much astonished that no representative of the German Embassy was present, but soon learnt that for political reasons this was intentional.

He was much impressed with the personality of the Grand Vizier, Prince Said Halim, and expresses surprise that this eminent statesman, who throughout the war had protected all subjects of enemy nations in Turkey, was removed to Mudros as a prisoner in 1919.

Liman von Sanders, on taking up his duties, was at first appointed to the command of the 1st Army Corps in Constantinople.

The Russian Ambassador, in the name of his country, strongly objected to a German General holding the executive command in the capital, and Prince Lichnowsky reported from London that Sir Edward Grey was also not too well pleased.

Berlin suggested that Liman von Sanders should exchange the command of the 1st Army Corps for that of the 2nd Army Corps at Adrianople.

Liman von Sanders appears to have shown much backbone, and declaring that the command at Adrianople, a 12 hours' train journey away, was incompatible with his necessary duties in Constantinople, offered to resign and return to Germany.

The difficulty was overcome by his promotion by the Kaiser to be General of Cavalry, and in consequence his rank in the Turkish Army

became automatically that of Field Marshal. This entailed his resignation of the command of an Army Corps, and he was appointed Inspector General of Turkish Armies.

In January, 1914, Izzet Pasha, the War Minister, resigned on account of ill-health, and the next evening Enver, in General's uniform, arrived at Liman von Sanders' office and announced himself as War Minister.

The Sultan was quite unaware of this appointment and learnt of it first from a daily paper. Soon after this Enver married himself to a wealthy Imperial Princess. From these facts, says Liman von Sanders, it is easy to see how powerless the Sultan was in face of the all-dominating "Committee of Progress."

The first thing Enver did was to dismiss 1,100 officers whom he considered as political opponents, and a number of these were thrown into the dungeons under the War Ministry.

Enver declared to Liman von Sanders that these officers were those who had done badly in the Balkan War, or were too old or lazy. "These statements were quite untrue." It is clear that from the very start Liman von Sanders found Enver almost impossible. To quote his own words:—

Before long friction commenced between Enver and myself. For example, I had inspected in Tchörli troops of the 8th Division, and found them in a sad condition. The officers had had no pay or allowances for over six months. The men had also had no pay for ages, were badly fed, and their uniforms in rags.

The greater part of the Guard of Honour at Tchörli Station had wretched boots or shoes, and some were bare-footed. The General informed me that he could not carry out manoeuvres, as the men were too weak to march, apart from their miserable clothing. I reported this in writing to Enver and he at once dismissed the Divisional Commander, Colonel Ali Riza Bey.

Liman von Sanders replied that his military usefulness to Turkey would be impossible if this sort of thing took place, and Ali Riza Bey was reinstated. However, they still continued to get at Liman von Sanders and deceive him in every possible way.

When he went to inspect troops, new clothing was sent beforehand by the War Office and taken away immediately after his visit.

Turkish officers did not consider it in any way their duty to look after their men. Many units were infected with vermin, the state of the hospitals was deplorable, and at one visit Liman von Sanders found certain doors locked and no keys available. When, owing to his insistence, the doors were forced, the rooms were discovered full of sick and dying men, who had been thus hidden away.

Cooking arrangements were utterly primitive, and, when Liman von Sanders proposed to order from Germany a sample cook-house installation, one of his German subordinates found, by the merest chance, a brand new one still in its packing-cases, which had been sent by the Kaiser as a present five years previously.

Nevertheless, Liman von Sanders pays a tribute to Enver Pasha and says that from the time he became War Minister he set to work

strenuously to put things right; but, as usual in Turkey, there was no money.

Liman von Sanders speaks in very friendly terms of his relations with Admiral Limpus, and with the French General Baumann, commanding the Turkish gendarmerie. He says that Von Wangenheim, the German Ambassador, who died suddenly early in 1915, was energetic and impulsive, but in his judgment of Turkish affairs, and particularly of the Young Turks, far too optimistic. Early in 1914 the original strength of 42 German officers attached to the Military Mission was increased to 70, and before the end of the war had reached a total of 800.

Early in August Liman von Sanders made every attempt to get himself and his mission re-called to Germany. As he says:

"We all thought the war would be a short one, and that it would be fought without us. Scarcely anyone believed that Turkey would join in, as it was well known that the greater portion of the Turkish Ministers were all for neutrality."

The Turkish army, however, commenced to mobilise in a somewhat leisurely fashion, and, though the 1st Army Corps in Constantinople was made more or less up to strength, the situation in the provinces was widely different.

Liman von Sanders was now appointed to the command of the 1st Army, head quarters at Constantinople, and comprising five Army Corps.

Towards the end of August Enver held a conference at which von Wangenheim, Liman von Sanders, Admiral Souchon—who had arrived with the "Göben"—and other senior officers were present. The subject of discussion was whether, in the event of Turkey joining in the war, an attack against the Suez Canal should be undertaken. The naval representatives spoke warmly in favour of such a course, but Liman von Sanders opposed the idea tooth and nail, and enters at considerable length in his book into his extremely sound and sensible reasons for such opposition. He proposed a totally different scheme, namely, in view of the situation on the German-Austrian front, that a big landing of Turkish troops should take place between Odessa and Ackermann, and the southern wing of the Austrian armies be thus set free. This expression of his views led to more than a coolness, as he tells us later, between himself and Admiral Souchon.

Throughout the book there is evidence that no love was lost between the sea and land forces of the German Empire in Turkey.

Liman von Sanders seems to have continued to rub in his objections to this idiotic Suez Canal scheme until he was brought up short by a direct order from home from the Imperial Chancellor to cease his opposition, and was categorically informed that "for our mutual interests operations against Egypt are of the highest importance."

The entry of Turkey into the war was now imminent, though, as we have learnt since, the Turks were virtually in the war from the first week of August.

Liman von Sanders recounts that on one of the last days of October,



Major von Lassert, on the staff of the 1st Army, arrived in a state of some excitement and reported that the "Göben" and the "Breslau" had had a successful action in the Black Sea, near the mouth of the Bosphorus, with Russian warships. Liman von Sanders says :

" These facts made the entry of Turkey into the war inevitable. To me the news came as a complete surprise, for neither the Ambassador or Admiral Souchon, with the latter of whom I had not spoken since our difference over the projected attack on Egypt, had informed me that the Turkish Fleet had entered the Black Sea."

Nor had anyone apparently told Liman von Sanders of the treaty between Germany and Turkey, signed on 3rd August. Admiral Souchon knew, but Liman von Sanders was kept in the dark.

Towards the middle of November Turkey proclaimed the Holy War, from which great results were expected—hopes that were very soon extinguished.

" The Anatolian soldier required no such incentive to fight for his Padishah, the Arab subjects of Turkey were not in the least influenced by it, for they were greatly discontented, and in foreign Mahommedan countries the people were either held too tightly in hand by their rulers or were incapable, as in the case of Persia, for any national uprising."

The cry of the Holy War, as Liman von Sanders remarks, did not ring true, for Turkey was allied with Christian nations, and had Germans and Austrians fighting in the ranks of her army. He points out that Lloyd George, in a speech in the summer of 1919, displayed the same want of logic when he spoke of General Allenby's *crusade* in Palestine.

Liman von Sanders gives a short account of the expedition against the Suez Canal. Djemal Pasha commanded the 4th Army, destined for the attempt, and had Colonel von Frankenberg as Chief of the Staff. All the preparations, however, had been already made by Colonel von Kress, on the Staff of the 8th Army Corps in Damascus. That the attack failed was not to be wondered at. As Liman von Sanders says :

" Egypt could not be conquered with a force of about 16,000 Turkish troops. Nevertheless, for all time the operation will be recognised as an exceptionally good piece of work, seeing that the force crossed the desert of El Tih in seven days, and actually reached with its advanced elements the Suez Canal near Ismailia.

" The advance, undertaken only by night, remained concealed, really on account of the careful precautionary measures of the English. Thanks to their extended spy system they naturally knew of the Turkish concentration east of the desert ; but, in view of its weakness, it gave them little anxiety, and they considered that any advance against Egypt with such exiguous forces was impossible.

" Our reconnaissance officers discovered English officers playing football at the moment that our advance guard was only 25 kilometers from the Canal."

Liman von Sanders then describes in a few pages the attack on the Canal on the night 2nd/3rd February, 1915. He says directly the first British post opened fire the Arab soldiers with the pontoons and boats panicked. Two Turkish companies which succeeded in reaching the west bank were killed or taken prisoners. Strong reinforcements of

the enemy arrived, armoured trains and five war-vessels came upon the scene. The Turkish force, however, succeeded in maintaining its position on the Canal until the evening of 4th February, and an attack by the British on its right flank was repulsed. At four o'clock p.m. on 4th February, the General commanding the 8th Army Corps decided to retire. A retreat, which was unhindered, took place to a camp 10 kilometers from the Canal. The Indian and Sudanese troops of the enemy displayed little initiative. The continuation of the retreat was carried out with negligible losses.

"At the beginning of the Great War the British always required tedious preparations for their undertakings. As the attack over the desert was unexpected, so no pursuit had been allowed for in the English programme, and it required a long time to set it in motion."

I have not attempted to check or compare this account with our own despatches, but am merely repeating Liman von Sanders' statements.

It has not been easy to condense a review of Liman von Sanders' earlier chapters before coming to the really interesting portion of the book, namely, his account of the Gallipoli fighting.

He tells us that in the beginning of 1915 universal attention began to be directed more and more upon the Dardanelles. Much intelligence regarding enemy intentions, movements of ships and transport of troops reached Constantinople from different quarters; "especially from Athens."

Liman von Sanders criticises a good deal the divided system of command, and the mixture of troops that characterised the Bosphorus and Dardanelles defences at this moment.

In anticipation of a possible break through of the British and French fleets towards Constantinople, Liman von Sanders says that, as 1st Army Commander, he had made numerous arrangements which would have rendered any long stay of the fleet before the capital extremely difficult.

From San Stefano to Seraglio Point on the Asiatic shore, and on the Princes' Islands, numerous batteries with cross-fire had been established; flying detachments and reserves were held in readiness.

The "Göben" and the "Breslau," together with the Turkish fleet, were ready to engage the Allied ships, weakened by their probable losses in breaking through. Even in case of success over all these obstacles, the Allied squadrons would have found themselves in a position untenable for any length of time unless they had meanwhile, with strong forces, definitely occupied *both shores of the Dardanelles*.

The ignoring of this elementary factor seems, to the present reviewer, one of the main causes of our failure in the subsequent campaign. The French Colonel Maucorps' appreciation of the situation, communicated to Lord Kitchener on 27th February, that "an attack on the Asiatic side presented least difficulties"—Maucorps had been five years in Constantinople as Military Attaché—and Lord Kitchener's final written instructions that "the occupation of the Asiatic side by military force is to be strongly deprecated"—give reason for much painful thought.\*

\* Final Report, Dardanelles Commission. Paras. 13 and 18.

Enver selected this moment to make one more attempt to get rid of Liman von Sanders, and pressed on him the command of the 3rd Army at Erzeroum; but the offer was energetically declined. As an example of Enver's pleasantries, Liman von Sanders recounts how, on the 15th February, 1915, the Sultan presented Colours to the 3rd Division at the Dolma Bagchte Palace, and Enver kept the parade waiting for a whole hour before he arrived. "The old and invalid Sultan had frequently to submit to similar impertinences from the Young Turks."

The bombardment by the Allied Fleet of the old forts at Seddul Bahr and Kum Kale on 19th and 25th February is described in a few lines, and their destruction remarked on as a foregone conclusion under the circumstances. "The subsequent attempts to land parties of marines failed," which is not entirely correct, for they landed but got no distance; and the yarns that they reached the top of Achi Baba are, of course, rubbish.

At the end of February Turkish General Headquarters became very nervous as to a successful break through by the Entente, and all preparations were made for the retirement into Asia of the Sultan, his government and treasure.

On the 20th February Enver ordered various new dispositions of the Turkish forces, which Liman von Sanders convincingly shows were futile beyond belief. Fortunately for Turkey, they were for the moment dropped, and subsequent events wiped them out.

The events of the unsuccessful attack by the Allied Fleet on 18th March are related with not unnatural satisfaction. The damage to the forts was relatively slight and the total casualties under 200.

Already, before this date, news had reached Constantinople from Athens, Sofia and Bucharest that a great expeditionary force directed at the Dardanelles was in preparation. The numbers varied; one day it was 50,000 men, on another 80,000 English troops with 50,000 French, and so on. "On the 17th March it was known that four English officers had arrived at the Piræus and purchased 42 lighters and five tugs."

At length, on 24th March, Enver decided to form a special Army, the 5th, for the defence of the Dardanelles. Late that afternoon Enver appeared in Liman von Sanders' office and asked whether he was prepared to take command of this new Army. The answer was in the affirmative, but strong reinforcements for the troops already in the Peninsula were demanded, and Enver was warned that there was no time to lose.

On 25th March Liman von Sanders and his Staff left Constantinople, not to return to it for 10 months. He landed at the town of Gallipoli on the 26th, and took over quarters in the house formerly occupied by the French Vice-Consul. The house had been plundered of everything except a round table and a wall mirror. Liman von Sanders complains that later he was accused by the Greek press of having looted this house, and remarks that he had something better to do than to take a round table and mirror with him on service. Liman von Sanders' 5th Army at this

moment comprised only five Divisions, each Division 9-12 Battalions, with a battalion strength of 800-1,000 men.

He found a great deal of work to do, as the whole system of the grouping of his units and of the coast-defence had to be altered. The existing arrangements were that the troops were dispersed everywhere, watching every yard of the coast, "reminiscent of the good old times." The enemy landing anywhere would have met some resistance, but with nothing behind it.

The English, he says, were good enough to give him four weeks for his preparations, which was just enough, and this also afforded time to bring down the 3rd Division from Constantinople. It was out of the question to cover all the possible landing places, of which there were many, and it became necessary to consider which were the most dangerous, and to distribute his troops in strength accordingly.

Liman von Sanders discusses at some length the various points of danger. He evidently considered the Asiatic side as clearly inviting attack; there were suitable landing places with an excellent jumping off place at Tenedos, and, after the landing had taken place, good covering positions. All the most important batteries defending the Narrows were south of the Straits, and offered every chance to an enemy attacking from their rear; lastly, the road-system of the neighbourhood was "disagreeably favourable." On the Gallipoli Peninsula itself he names three places as "especially important and threatened." The first was Seddul Bahr and Teke-Burnu, *i.e.*, Cape Helles, with the area behind it commanded by ships' fire on three sides.

The obvious objective here to an enemy was Achi-Baba, "up to which the gently rising *terrain* offered no difficulty." [We who were there do not hold the same opinion.] From the crest of Achi-Baba a portion of the batteries on the Narrows came under direct artillery fire. The second danger-point was the coast-line on each side of Gaba Tepe. From here stretched a broad flat country (broken only by low rising ground), leading direct to Maidos. From the high ground near Maidos the defences of the Straits could be bombarded with certainty. He remarks, however, that before attacking Maidos from Gaba Tepe an enemy must, at the same time, make good the Ari-Burnu heights. The third and "especially important" landing place was at the 3-4 mile wide neck of the Peninsula on the Gulf of Saros near Bulair. Should an enemy succeed in capturing the narrow ridges between the Saros Gulf and the Sea of Marmora the 5th Army communications by land would be cut entirely off, and, further, its communications by sea would be placed in grave danger.

Following this appreciation of the situation, Liman von Sanders formed three "fighting groups." The 5th and 7th Divisions were placed near the Gulf of Saros; the 9th and newly formed 19th Divisions in the southern portions of the Peninsula; and the 11th Division, to be joined shortly by the 3rd Division from Constantinople, on the Asiatic side.

Each Division was ordered to keep assembled in strength, with minimum forces on their coastal sectors. He next sought to make his troops



mobile, for, as he says, the men through nothing but coast watching had become "entirely benumbed." Marches, manœuvres and night operations were at once set going. Improvement of communications between the different sectors, by means of labour-battalions, were begun without loss of time. Throughout the Peninsula hardly anything but tracks for pack-animals existed, and there were no roads for field artillery.

[We know that this was so from the condition of the Krithia road, probably one of the best on the Peninsula.]

The 5th Army did not possess a single flying machine, the few aeroplanes in Chanak belonged to the forts.

Any movement of troops came under instant fire from enemy ships, and Liman von Sanders states that he was astonished at the way that single horsemen or men on foot were fired at. The fortification of the coast line, for which materials were scanty, was carried out at night—torpedo heads being used for land mines, and under-water barbed wire being fixed in place.

Liman von Sanders says that the enemy Press complained that the English airmen had not recognised or reported properly the positions of the Turkish troops. This reproach, he says, need not be considered correct, for the places for the landing were clearly based on old reports from the flying corps, and the new grouping and arrangements carried out in the last weeks were, owing to the precautions he took, not easily recognisable.

On the 24th of April, Liman von Sanders conducted a big manœuvre on the Asiatic side with the 11th Division, the scheme being an enemy landing at Besika Bay, and returned that night to Gallipoli. At 5 a.m. next morning, the 25th, reports came pouring in to Headquarters at Gallipoli of various enemy landings or threatened landings.

The Asiatic shore, Morto Bay, Seddul Bahr, Gully Ravine, Gaba Tepe, Ari-Burnu, were all being attacked, and numerous war vessels and transports were reported nearing the coast in the Gulf of Saros. Liman von Sanders describes the scene thus :—

"From the numerous white faces of the officers reporting in these early morning hours, it was obvious that, although an enemy landing had been certainly anticipated, the onslaught at so many places caused much surprise and anxiety. My first feeling was that nothing regarding the measures taken required to be altered. This was most satisfactory. The enemy's forces had selected exactly those very places which we ourselves had especially protected. That at all the reported places serious landings would take place, I thought very doubtful, but for the moment the decisive point was not apparent. As soon as the 7th Division in Gallipoli town had been alarmed and directed towards Bulair, I rode myself, with my German A.D.Cs., to the heights in that neighbourhood."

He mentions incidentally that, whilst on these heights, they were fired at by a British submarine in the Marmora Sea.

Liman von Sanders was suspicious from the first that the enterprise at Saros and Bulair was merely a feint—the ships were too high out of the water, the view of the decks was concealed by canvas coverings,



and no sign of troops or boats putting out could be seen. Nevertheless, he was so anxious regarding an attack in this locality, that he only moved a few battalions south as reinforcements, and remained himself on the Bulair heights until the morning of 26th April.

He now came to the conclusion that the Saros Gulf attack was merely a demonstration and departed for Maidos, leaving Kiazim Bey in command, with instructions that, if within the next 24 hours no attempt at landing took place, the whole of the 5th and 7th Divisions were to march also to Maidos.

This movement accordingly took place and the upper Saros Gulf was entirely denuded of troops, except a Pioneer Company and some labour battalions, who showed themselves and pitched tents and made demonstrations.

Liman von Sanders says that this decision to uncover the Bulair lines was a very grave and weighty one for any responsible commander to take. Had the English observed this weakness they would certainly have made decisive use of it.

Liman von Sanders now took up his quarters in camp at Maltepe, north of Maidos, and some three miles behind the Anzac front. Good news soon came from the Asiatic side, as, after four days of bitter fighting, the French forces, consisting of Colonial troops and the 175th Regiment, were, he says, thrown back on their ships with heavy losses. This enabled him to reinforce the Peninsula with the 11th Division, leaving only a portion of the 3rd Division to guard the Asiatic coast.

Meanwhile the British forces were firmly on shore both at Anzac and Helles, and, though Enver telegraphed from Constantinople that they were forthwith to be expelled, this was beyond the powers of the 5th Army.

Liman von Sanders says that on three successive nights this was attempted under the command of Colonel von Sodenstern, and, although one attack nearly reached Seddul Bahr, all were failures. The overwhelming fire from the enemy fleet at daybreak invariably obliged the Turkish troops to return to the cover of their trenches. "The many captured machine-guns could only in part be brought back." Here Liman von Sanders interpolates a generous appreciation of the gallantry displayed by the troops taking part in the landings, and says "even an enemy must recognise that the attacks were carried out with the greatest bravery and tenacity." He also takes the opportunity of having another slap at what he calls "The Turkish-German Navy." He points out that in these first and in the succeeding battles on the Peninsula the Navy took a very small share.

He says it is necessary to make this clear because he was astonished to find in Germany quite an erroneous opinion on this point. He recognises the useful assistance of two machine-gun detachments of 12 guns, each supplied by the fleet, and says that in the first weeks of the campaign the "Haireddin Barbarossa" and "Torgut Reiss" (the former German-battle-ships "Weissenburg" and "Wörth") employed indirect fire on the landing places.

[The armoured-car section at Helles may perhaps remember the new species of heavy shell which fell in their lines on 26th July. They were almost certainly naval shells from the Narrows.]

In large print he emphasises the statement "that during the 8½ months' campaign on the Peninsula the 'Göben' and 'Breslau' never came to the Dardanelles."

He mentions that the bombardment of Seddul Bahr and neighbourhood by the Turkish Asiatic batteries was much restricted by want of ammunition. He adds that the Entente Fleet never succeeded in touching these batteries. As all of us who were there know, "Asiatic Annie" and her sisters were easily the most unpleasant guns on the Peninsula.

In the beginning of May, Liman von Sanders says the campaign had settled into a war of positions and the orders he gave were that, as far as possible, not a foot of ground was to be surrendered, but that every opportunity was to be taken to push the Turkish trenches as close to the Allies' works as possible, without making any big attack. This was ordered with a view, apparently, of neutralising the ships' bombardment of the front line Turkish trenches. The fleet bombardments in the back areas, he complains, were most severe and trying.

Maidos was practically destroyed on 29th April, the first building to be set on fire being the Military Hospital, filled with wounded; in addition to many Turks, some 25 wounded British soldiers lost their lives. Many other small towns on the Peninsula were similarly ruined, and Liman von Sanders calmly suggests, on the analogy of Northern France, that the Turks have also morally the right to demand reparation and restoration.

The supply of the Turkish Army, which was mainly by water, was grievously interrupted, and though the enemy submarines failed in their task of stopping it, nevertheless "the 5th Army starved."

On the 5th May, Colonel Weber took over the command of the southern group from Colonel Sodenstern, who was invalided to Constantinople.

In the trench-warfare which now ensued the Turks suffered much from want of materials. "Whilst the British could call upon the whole world for these, the poor Turks had often to capture them first from the enemy. Sandbags were very scarce, and when some thousands of these arrived one could not be sure that unit commanders would not intercept them in order to repair their men's uniforms." The cold-blooded and stoical Anatolian soldier, with his total disregard of the ordinary necessities of life, was, however, proof against all these difficulties.

Liman von Sanders goes on to say that the officers had frequently not as good nerves as their men. He was repeatedly pressed to withdraw the Helles front back to the crest line of Achi-Baba, as the ground south of Krithia offered no good defensive positions.

These contentions were, of course, absurd, and apart from the fact that any withdrawal would have necessarily increased the length of front, Liman von Sanders refused to listen.

Soon after this the 5th Army was reinforced by the 4th, 13th, 15th, and 16th Divisions, and on 10th May by the well trained 2nd Division. Also a few heavy guns arrived from Constantinople.

Army Headquarters moved into a camp 3 kilometres from Bigali and 5 kilometres behind the Anzac front. It was well concealed amongst pine woods and, Liman von Sanders says, was never found by enemy aviators.

The new 2nd Division was ordered to attack at Anzac on the night of the 18th-19th May, and broke through the front line but could get no further. The losses on both sides, Liman von Sanders says, were so great—the 2nd Division had 9,000 killed and wounded—that the English General asked for an armistice to bury the dead.

Liman von Sanders says this attack was a mistake on his part, due to insufficient artillery preparation, and to his having underrated the enemy.

On the 13th May, the "Goliath" was sunk by the torpedo-boat "Monavere Milli" under Captain-Lieutenant Firle, and on the 25th and 27th May "Triumph" and "Majestic" were torpedoed. These successes, however, by no means satisfied Liman von Sanders, and he complains that after this the "U" boats obtained no further results, except the sinking of one transport.

He appears to have complained bitterly about this by telegrams to Admiral Souchon at Constantinople on the 16th and 20th June, and laments particularly the unopposed fire from our ships during our attacks on 28th June at Helles. No particular mention is made of the fighting on 4th June. Towards the end of June the only body of German soldiers that ever reached the Peninsula arrived; these were a Pioneer Company of 200 men. They were sent to the Helles front, and in a very short time were reduced to 40 men and were thereafter used as foremen for working parties on both fronts.

During the first fortnight in July the troops on the Helles front were relieved by fresh units from the 2nd Army. It was during this relief that our big attack—that of the 12th July (wrongly dated by Liman von Sanders as the 13th)—took place. It was only repelled, he says, with the greatest difficulty, and by bringing up the absolute last reserves.

We who were present know that, so far from this attack being repelled, every single objective ordered was gained, and held until the evacuation in January—but we equally had no reserves with which to exploit our success.

Liman von Sanders says it was great good fortune for him that the British attacks were never carried through for several days, but there was always a considerable pause between each action. Had it been otherwise it would have been impossible to hold on on account of want of artillery ammunition. About the 16th July came a report from Salonika of a threatened new landing—50,000 to 60,000 fresh troops and 150 warships and transports were stated to have collected at Lemnos. An attempt to appreciate where this attack was probable became necessary. The

Helles front was ruled out as, though the line there could be strengthened, it could not be lengthened. Both flanks at Anzac were open, and though Liman von Sanders anticipated no danger from the British right flank, he was doubtful about the left. Again, he appears to have been anxious about Bulair, where he had the 7th and 12th Divisions. From Azmak-Dere, north of Anzac, to Suvla Bay he had only three battalions, a squadron, and four batteries under Major Willmer. In the middle of these preparations and anxieties, Liman von Sanders was dumbfounded at receiving an order, dated 26th July, to return to Germany and make a personal report on the campaign to the Kaiser. Field Marshal Von der Goltz would relieve him, with, if desired, the Military Attaché, Colonel Von Lossow, as Chief Staff Officer.

He publishes a letter, dated 8th July, from Von Falkenhayn conveying the Emperor's congratulations on his distinguished services, and a telegram from the same source of 22nd July warning him that a new attempt would be made against him early in August. On the top of these, like a bolt from the blue, came the telegram of virtual recall. Liman von Sanders took a strong line, for which one admires him, and telegraphed on 28th July that as General von Falkenhayn had nothing directly to do with the Dardanelles Campaign, and as neither the Turkish Government or Enver were concerned in this order, he begged that the Kaiser would direct that he should be permitted to demand his release from the Turkish service. In two days he received a reply that the order was cancelled, but that Attaché Von Lossow was to join his Staff. The latter arrived on 13th August, but his stay was brief, for Liman von Sanders says he could find no work for him to do. Soon after this, he says, he received from Constantinople the complete story of the intrigue against him (from which he entirely exonerates Enver) which had been set on foot.

Less serious than the above correspondence were the numerous alarmist reports connected with the threat of the new landing which Liman von Sanders received from Constantinople. He mentions one of them. The Adjutant of the Military Mission reported that he had learnt from sure sources that windows in the streets of Pera were already being let to witness the entry of the British troops, and that the British Embassy was being cleaned up and the beds therein being put in order. Liman von Sanders' reply was to beg the Adjutant to also hire a window for him.

*(To be continued.)*

## NAVAL NOTES.

### GREAT BRITAIN.

#### ROYAL MARINE AMALGAMATION.

The second quarter of 1923, with which the following Notes are concerned, was comparatively uneventful in the Royal Navy. Perhaps the outstanding occurrence, foreshadowed on page 335 of the last issue of the *Journal*, was the amalgamation of the Royal Marine Artillery and Royal Marine Light Infantry. The Admiralty Fleet Order giving effect to this decision was dated 22nd June. On the same day, the King, as Colonel-in-Chief of the Royal Marines, directed the following message to be promulgated to the Corps:—

"It is with great regret that, in consequence of the reduction in numbers and the necessary financial economies necessitating the abolition of one of the historic divisions, I have concurred in the amalgamation of the Royal Marine Artillery and the Royal Marine Light Infantry. The two branches during their period as separate units have each worthily upheld the traditions of the old corps of Royal Marines from which they were derived. As their Colonel-in-Chief, I desire to express to them my appreciation of their former services, and I am confident that under the new title of Royal Marines they will continue to maintain that reputation for loyalty and devotion to duty which has ever been the pride of the Corps of Royal Marines."

Following the amalgamation, which is due to further economies being essential, there will in future be common entry and training. The Corps will be called the Royal Marines, and will be composed of:—(a) First Division, Chatham; (b) Second Division, Portsmouth, Eastney Barracks; (c) Third Division, Plymouth; (d) Depôt, Royal Marines, Deal; (e) R. N. School of Music, Portsmouth, Eastney Barracks; (f) School of Land Artillery, Portsmouth, Eastney Barracks; (g) Small Arms School, Portsmouth, Browdown; (h) School of Signalling, Chatham; (i) School of P. and R. Training, Deal. Of these, (e), (f), and (g) will be under the Colonel-Commandant, Portsmouth; (h) under the Colonel-Commandant, Chatham; and (i) under the Colonel-Commandant of the R.M. Depôt.

All ranks will be trained as infantry in accordance with the Army training manuals and in naval gunnery as at present. A percentage of officers and men will be trained in land gunnery, including management of searchlights, forming a nucleus for coast defence, anti-aircraft and medium batteries. Specialists will also be trained in machine gun.

Officers and warrant officers will be combined on one list. In the case of officers this will be done according to rank by date of seniority. When two or more officers are of the same date of promotion they will be placed in order of date of entry into the Service. If still of the same seniority, they will be placed in each batch in proportion of one R.M.A. to three R.M.L.I., the senior of the batch being determined by age. The titles "gunner" and "private" will be dropped, and the title "marine" (abbreviation "Mne.") adopted. Ranks rendered surplus as a result of amalgamation will be allowed to retire and to take their discharge on the special terms outlined in A.F.O.s 1358 and 1359, 1922.

The uniform alterations, approved by the King, include the adoption of blue cloth tunics with scarlet facings. The detachment of the Royal Yacht will remain for the present in scarlet tunics, and the divisional headquarters' bands will also be in scarlet, *i.e.*, the Chatham, Plymouth and Deal bands. The Portsmouth Division



(late R.M.A.) band will be in blue. The grenade and bugle in the cap badges and elsewhere will be replaced by the lion and crown. The letters "R.M." are to be worn on the shoulders by all ranks. Shoulder sashes are to be worn by all sergeants. The mess dress is to be scarlet cloth of the pre-1920 infantry pattern. Scarlet is retained for the mess jackets, as it is the traditional colour of the Royal Marines.

#### FLAG COMMANDS AND APPOINTMENTS.

Eight changes affecting flag commands and posts were announced by the Admiralty. Vice-Admiral Sir Hugh H. D. Tothill, K.C.M.G., K.C.V.O., C.B., was appointed Admiral Commanding Reserves, in succession to Vice-Admiral Sir Morgan Singer, K.C.V.O., C.B., to date 24th July. Rear-Admiral Wilmot S. Nicholson, C.B., will be Rear-Admiral (S), in succession to Rear-Admiral Hugh F. P. Sinclair, C.B., to date September 1st. Rear-Admiral Hugh D. R. Watson, C.B., C.V.O., C.B.E., on June 26th was made Rear-Admiral in the 4th Battle Squadron, Mediterranean Fleet, in succession to Rear-Admiral John D. Kelly, C.B., and was succeeded as Naval Secretary to the First Lord of the Admiralty by Rear-Admiral Michael H. Hodges, C.B., C.M.G., M.V.O. As from 8th August, Rear-Admiral David M. Anderson, C.M.G., M.V.O., becomes Rear-Admiral and Senior Officer, Yangtse, in succession to Rear-Admiral Crawford MacLachlan, C.B.; and on 4th October, Rear-Admiral Herbert W. Richmond, C.B., is to succeed Vice-Admiral Sir Lewis Clinton-Baker, K.C.V.O., C.B., C.B.E., as Commander-in-Chief, East Indies Station. Two changes are due to take place on 3rd October. Admiral Sir Montague E. Browning, G.C.M.G., K.C.B., M.V.O., will be succeeded as Commander-in-Chief at Plymouth by Vice-Admiral Sir Richard F. Phillimore, K.C.B., K.C.M.G., M.V.O.; and Vice-Admiral Sir Douglas R. L. Nicholson, K.C.M.G., K.C.V.O., will be succeeded as Vice-Admiral Commanding the Reserve Fleet by Vice-Admiral Sir William E. Goodenough, K.C.B., M.V.O.

H.M.S. "SARPEDON" AT LONDONDERRY.—The destroyer "Sarpedon," Lieutenant-Commander R. Langton-Jones, D.S.O., R.N., was detailed by the Admiralty to proceed to Lough Foyle to take part in the ceremonies connected with the State Entry into Londonderry of the first Governor of Northern Ireland. She arrived at Derry on 1st May, and two days later a platoon of bluejackets was landed under Lieutenant H. F. Hackett for a Guard of Honour, which the Governor inspected at the Guildhall. The destroyer was dressed overall. In the afternoon the Duke and Duchess of Abercorn paid a surprise visit to the "Sarpedon," when the crew manned ship and gave three cheers for the Governor. In the evening, the destroyer gave a firework and searchlight display.

COASTGUARD REORGANISED.—On 1st April, the Coastguard was reorganised in accordance with the recommendations of the Inter-Departmental Committee of 1922. The Admiralty retained only a small section of the force for the war signal stations. A new Coastguard Force under the Board of Trade was inaugurated for coast-watching, life-saving, salvage and foreshore administration, the Inspector-General of which is Captain J. D. Daintree, C.B.E., R.N., formerly Senior Inspector of Life-Saving Apparatus under the Board of Trade. The Board of Customs and Excise became responsible for the protection of revenue.

RECRUITING PROGRESS.—The grades in which recruiting is now open, and the numbers being entered, are as follows:—Boys, 47 per week; 2nd class stokers, 43 per week; blacksmiths, plumbers and painters, one per quarter each; joiners, two per quarter; probationary sick berth attendants, 13 per quarter; assistant cooks, 21 per quarter; officers' cooks, 4th class, 25 per quarter; officers' stewards, 4th class, four per month; boy servants, nine per month. Royal Marines are being entered as required.

**ENGINEER-LIEUTENANTS' PROMOTIONS.**—On 5th January, changes were announced in the regulations governing the promotion of engineer lieutenants on the active, retired, emergency, and Special Reserve Lists to the rank of engineer lieutenant commander. Engineer lieutenants on the active list on or after October 20th, 1922, will be advanced to engineer lieutenant-commander as from that date or on attaining eight years' seniority in the former rank, if later. There is no longer a qualifying Examination, and the procedure is thus brought into line with that for the executive branch. Engineer lieutenants on the retired or emergency lists who held that rank on the active list on or subsequent to October 20th last will be allowed to assume the rank of engineer lieutenant-commander from the date of attaining eight years' seniority on their respective lists. Engineer lieutenants placed on the retired or emergency lists prior to October 20th will be subject to the regulations as to advancement hitherto in force. Engineer lieutenants of the Special Reserve will be eligible for advancement to engineer lieutenant-commanders on completing eight years' seniority, subject to their satisfying the Admiralty that they have kept their knowledge of marine engineering development and practice reasonably up to date.

**THE ROYAL NAVAL BENEVOLENT TRUST.**—In a Fleet Order on 5th January outlining the present position of the Royal Naval Benevolent Trust the Admiralty emphasised the fact that the voluntary system of donations by Fleet Canteen Committees was inequitable in principle and likely to prove insufficient in amount. Petty officers and men were invited to express their views on proposals aimed at ensuring that all who were eligible to share in the benefits of the Trust should contribute to that Fund. It was suggested by the Board that one-fifth of the amounts due from the Navy, Army and Air Force Institutes in canteen rebate should be handed to the Trust. The result of the referendum to the Fleet on the subject of allocating canteen profits to the work of the Royal Naval Benevolent Trust was announced by the Admiralty on 16th June as being overwhelmingly in favour of contributing one-fifth of the amount due in canteen rebate, rent, etc. to the Trust. It was decided to adopt the scheme universally in its main features, subject to the position being reconsidered two years hence.

**COLONIAL ALLOWANCES REVIEWED.**—In a Fleet Order on 12th January the Admiralty directed that the annual reports due in connection with all Colonial allowances to officers were to be made in two parts—one, a report by the Commanders-in-Chief on the position generally; and the other, a statement by each officer drawing allowances, showing the arrangements made for food, accommodation and attendance, and also the actual expenses incurred. A Colonial allowance, the Admiralty stated, is intended to meet that part of the necessary expenditure of an officer himself in respect of food, accommodation and attendance, which, owing to the exceptional circumstances, is not covered by his normal allowances when serving on shore abroad. It is simply a compensatory allowance, and not in the nature of an emolument.

**THE AUSTRALIAN NAVY.**—On 16th January, in an interview with the *Sydney Herald*, Commodore Albert P. Addison, C.M.G., Commanding the Australian Fleet, said that the Australian Squadron is actually better than those maintained by the Admiralty on the East Indies, the African, or the North American Stations. Australia was manifestly unable to afford a large Navy at the present time, but he hoped she was maintaining an efficient unit, which would be capable of expansion when times were better. After speaking of the advantages of naval training for young Australians, particularly in the specialist branches, Commodore Addison said that recruiting was not good at present in Australia, and it had become necessary to get more ratings from England.

**ACCOUNTANT BRANCH ECONOMY.**—On 26th January, the Admiralty directed that in ships where no accountant officer of commissioned rank is borne, and for which accounts are rendered direct to the Admiralty, the commanding officer is to detail an executive or engineer officer of commissioned rank to carry out the accountant duties. A medical officer may volunteer to perform the duty should no other suitable officer be available. An allowance, varying from 2s. 6d. to 1s. a day, is payable to an officer of any branch while performing accountant duties where no accountant officer is borne. The commanding officer is not to undertake the accountant duties personally unless no other suitable officer is available. When a ship not bearing an accountant officer meets a senior officer's ship carrying one, the senior naval officer is to arrange for the accountant officer to verify the balance of public money, to inspect the accounts, and to give the officer performing accountant duties any advice necessary.

**MIDSHIPMEN'S EXAMINATIONS.**—The Admiralty have decided that, in future, Dartmouth midshipmen are to be examined afloat in seamanship for the rank of lieutenant on, or shortly before, attaining two years and four months' seniority, and, if successful at the first attempt, are to be rated acting sub-lieutenants from the date on which they complete that seniority. Special entry midshipmen of seniority of 8th January, 1922, are to be examined in seamanship on completing two years' seniority, and, if successful, are to be rated acting sub-lieutenants from 15th January, 1924. Special entry midshipmen of September 15th, 1922, and later are to be examined in seamanship on, or shortly before, attaining two years and four months' seniority, and, if successful, are to be made acting sub-lieutenants from the date of completing such seniority.

**MACHINERY ALLOWANCES.**—In new ships, prior to commissioning for service, machinery allowance and senior engineer's allowance will in future be payable at the same rates and under the same conditions as in ships paid off for refit, when the ship's engineer officer has taken over responsibility for the boilers and engines from the dockyard or contractors. Machinery allowance is at the rate of 4s. a day to engineer-commanders, 3s. to engineer lieutenant-commanders, and 2s. to engineer-lieutenants and junior officers. Senior engineer's allowances are at the rate of 2s. a day to engineer lieutenant-commanders, and 1s. a day for junior commissioned and warrant officers. The new order is made retrospective to July 1, 1922.

**NEW R.N.V.R. MEDAL RIBBONS.**—The ribbon of the R.N. Volunteer Reserve officers' decoration has been altered as follows :—Half-inch Navy blue at ends and quarter-inch deep hooker green in centre, with two one-eighth strips of Royal red dividing them. The R.N. Volunteer Reserve Long Service Medal for men has been altered similarly, but the blue sections are a quarter-inch long, and the green sections half an inch.

**PETTY OFFICERS' UNIFORM.**—On 7th February, the concession to petty officers of four years' standing, made in April, 1920, of being allowed to wear class III. uniform with gilt buttons, and cap with pattern 49 gold badge, was extended to all petty officers with one year's service as such and confirmed in the rating. Men dressed as seamen were given a gratuity, to meet the cost of the change of uniform, of £14.

**BOW NECKTIES ABOLISHED.**—On 7th February also the wearing of the black silk bow necktie by ratings in class I. and class III. uniform was ordered to be discontinued, but men may be allowed to wear out any such ties now in their possession. In future, the uniform necktie for chief petty officers and all other

ratings not dressed as seamen is to be of black silk tied in a sailor's knot, for all occasions.

**MIDSHIPMEN'S SEA TRAINING.**—A Fleet Order on the subject of the sea-training of midshipmen, issued on 23rd February, was prefaced by a statement of the general principles upon which these officers are to be trained afloat. The primary object is to enable them to obtain experience in their duties, and training, based on formal instruction, is to be a secondary object. The Admiralty have adopted the revised arrangements as a result of the lengthened technical course for acting sub-lieutenants. Midshipmen are now to be regarded as being an integral part of the ship's organisation. General quarters, divisional drill, boat-work, general drill, divisions, both in and out of harbour, and watch-keeping at sea are to take precedence over formal instruction. Without prejudice to these governing principles, the Board consider that a certain amount of time will also be available for formal instruction, and this has been divided proportionately between the various subjects and syllabuses prepared.

**"CHATHAM'S" VISIT TO AUSTRALIA.**—The light cruiser "Chatham," flagship of the New Zealand Division, left Devonport, N.Z., on February 27th, to visit Jervis Bay, Sydney, Melbourne, and Hobart, in accordance with the arrangement made last year for the New Zealand and Australian squadrons to combine for exercises. The "Chatham" returned to Auckland in the middle of April.

**SENIOR NAVAL OFFICERS' TITLES.**—On March 2nd, the Admiralty stated in Fleet Orders that the title of "Senior Naval Officer" was frequently assigned to an officer appointed specifically for the charge of naval interests at a port or in a district. As this practice appeared to be open to objection because confusion might arise whenever an officer of higher rank to the Local Senior Naval Officer arrived afloat, it had been decided to discontinue it. In future, the title "Naval Officer in Charge," "Captain in Charge," or, in particular cases, "Resident Naval Officer," will be used.

**NAVAL ENGINEERS' RESERVE.**—The various orders issued in regard to the Special Reserve of Engineer Officers, R.N., established in 1920, have been co-ordinated, and complete regulations for the administration of the force were promulgated on March 2nd. The Reserve consists of Engineer Lieutenant-Commanders, Lieutenants and Sub-Lieutenants, and Warrant Engineers, and is composed of officers who held temporary commissions and warrants in these grades during hostilities, and who are appointed to the Reserve with the seniority last held by them in the Royal Navy. They are liable to be called up for immediate and continuous service at home or abroad at a time when a national emergency appears, in the opinion of the Admiralty, to be imminent, and are entitled to wear the uniform of officers of corresponding R.N. rank under the regulations laid down for officers on the retired and reserved lists. Pay and allowances during training or service are to be at the rates laid down for engineer officers on the permanent list. Officers will, however, be granted a rebate of income tax in respect of the maintenance of their uniform.

**ATLANTIC FLEET'S WORK.**—On returning from its spring cruise to the Spanish coast, the Atlantic Fleet gave leave between 5th April and 5th May, and afterwards carried out practices and exercises from home bases. On 25th June, the various Squadrons and Flotillas left Portland for independent cruises, the "Queen Elizabeth" and other ships to visit Bournemouth; the 1st Battle Squadron, Eastbourne, Folkestone, Deal and Margate; the Battle Cruiser Squadron, Norway;

the 1st Light Cruiser Squadron, Rothesay, Aberystwyth, and other west coast places; the 2nd Light Cruiser Squadron, Denmark, Sweden and the Baltic; and the 2nd Destroyer Flotilla, the Channel Islands, Falmouth and St. Ives. Other destroyers and submarines also cruised independently.

**VISIT TO ULSTER.**—From 21st May to 25th, the 1st Battle Squadron under Vice-Admiral Sir E. Alexander-Sinclair visited Belfast Lough, accompanied by the 4th Destroyer Division, in response to an invitation from the Government of Northern Ireland. The battleships anchored off Bangor, one of the seaside resorts of Ulster, and were open to visitors. Entertainments on an extensive scale were arranged, and at a luncheon by the Lord Mayor of Belfast, Lord Beatty, who was the guest of Lord Londonderry at Mountstewart, attended and spoke on the link between Belfast and the Navy which was represented by the shipbuilding industry.

**ULSTER NAVAL VOLUNTEERS.**—It was on this occasion that Lord Beatty stated that, thanks to the initiative of Sir James Craig, the Admiralty had considered and given their deepest thought to the raising of a Division of the Royal Naval Volunteer Reserve in Ulster. It was hoped to raise 500 officers and men. It would not be possible to make the necessary financial reservations for this year, but they hoped in April, 1924, the commencement of the next financial year, to be able to provide for that contingency. Captain R. F. H. Hartland-Mahon, R.N., was appointed to organise the new Division.

**PROMOTION ZONES.**—On 6th April, a Fleet order fixed the zones of promotion for the half-yearly selections in June, 1923, in the executive branch as the same as those laid down for the 1922 selections, viz., Commander,  $5\frac{1}{2}$  to 8 years on the date of selection; lieutenant-commander, 3 to  $6\frac{1}{2}$  years on the date of selection. A fortnight later, it was ordered that in the June selections for promotion to the rank of engineer-commander, the zone should be three years' seniority and over as engineer lieutenant-commander on the date of selection.

**NEW SUBMARINES.**—On 10th April, submarine "K. 26," the last of the "K" boats, was completed and commissioned by Commander Allan Poland, D.S.O., as tender to the "Dolphin" at Portsmouth. In June, she was ordered to make a cruise to Gibraltar and Madeira. Her displacement is 2,140 tons, as compared with 1,880 tons of earlier "K" boats; and submerged, 2,770 tons, as compared with 2,560. On 16th June, submarine "X. 1," stated to be the largest in the world, was launched at Chatham Dockyard by Mrs. Kiddle, wife of the Admiral-Superintendent. Her displacement is 2,780 tons (3,600 submerged).

**MARINE OFFICERS' RETIREMENTS.**—On 20th April, the Admiralty notified that regulations were to be introduced under which commissioned officers of the Royal Marines, in general, will be liable to compulsory retirement on completion of certain periods of non-service. This is similar to the principle already obtaining among officers of the Royal Navy. Commissioned officers, R.M., of or below the rank of colonel-second-commandant are to be retired after two years' non-service, colonels commandant on completing three years' non-service, and major-generals on completing three years from their last service, or, if not employed, on completing three years from the date of promotion.

**GREENWICH SCHOOL CHANGES.**—In a circular dated 25th April, the Admiralty announced that the Royal Hospital School, Greenwich, was to be removed to a new site on the estate of Holbrook, in Suffolk, given to Greenwich Hospital by Mr. G. S. Reade, as a token of his admiration for the services of the Navy in the war. In the course of two centuries, the site at Greenwich has become unsuitable for a large school, and is no longer capable of providing conditions worthy of the intentions of the Royal Founders of the Hospital, or of fulfilling modern standards



of health, particularly in regard to recreation. Mr. Reade's munificent gift of his family estates has provided an admirable site on which to rebuild this historic School. The fact that the estate borders on the estuary of the Stour will enable training in boat work to be resumed on inland waters far removed from the prohibitive dangers of Thames traffic. Another advantage is the close proximity of the new site to the Naval Training Establishment at Shotley.

**SPORTS CONTROL BOARD.**—The half-yearly report of the R.N. and R.M. Sports Control Board, to 31st March, was published on 3rd May, and showed that the Admiralty had decided to retain portions of Burntwick Island for recreational purposes for the Central Reserve of Minesweepers, Sheerness. Special attention has been paid to the foreign stations, a great difficulty being the deterioration of recreation grounds through the absence of white groundsmen. At Bermuda, the Admiralty has agreed to the request of the Commander-in-Chief for a permanent groundsmen. The report noted the increased popularity of Rugby football in the Navy, particularly among lower deck ratings, and in the West Country. This was the last report to be issued by Engineer-Commander E. W. Roberts, R.N., before retiring from the office of Secretary to the Board, which he had occupied since its formation in March, 1920.

**ENGINEER-CAPTAIN, R.N.R.**—On 11th May, the appointment was made of Chief Engineer W. J. Willett Bruce, O.B.E., to an honorary commission as Engineer-Captain, Royal Naval Reserve. This was the first appointment of an R.N.R. officer to the rank of engineer-captain since the latter was instituted two years previously. Engineer-Captain Willett Bruce has been since 1904 the Superintendent-engineer of the White Star Line.

**NEW CANADIAN MINESWEEPERS.**—It was announced in May that four new minesweepers which had been acquired for the Royal Canadian Navy had been named after places prominently connected with the fighting of the Canadian Expeditionary Force during the war. The two to be stationed at Halifax will be known as the "Festubert" and the "Ypres"; those at Esquimalt, the "Armen-tières" and the "Thiepval."

**PRIZE FUND PAYMENT.**—A supplementary distribution from the Naval Prize Fund has been approved. The share unit will be small, and its value will be notified when fixed. On 22nd June, the Admiralty expected to complete the necessary arrangements to enable a commencement to be made before the end of July. Payment to ranks and ratings now serving is to come after that to the *ex-Service personnel*. In the original payment of prize money, begun in the spring of 1920, the value of a full share was £2 10s.; and in the second distribution, begun in April, 1922, the amount of each share was £3 15s.

**STOREKEEPING ALLOWANCES STOPPED.**—Consequent on the formation of the Supply Branch, the Admiralty ordered that central storekeeping allowances were to cease on 31st May. As from 1st June, the differences of pay, if any, were to be paid to non-Supply Branch ratings filling actual vacancies for ratings in this Branch.

**"VICTORY" RESTORATION BEGUN.**—On 1st June, the anniversary of Lord Howe's victory of "the Glorious First," the restoration work on Nelson's flagship, the "Victory," at present in dry dock at Portsmouth, was officially begun. Earl Howe, a descendant of the Admiral, and Lady Fremantle, wife of the Commander-in-Chief at Portsmouth, formally inaugurated the work by lowering by means of an electrical device two cherubs, one from the figurehead of the vessel and the other from beneath the bowsprit. As souvenirs Earl Howe and Lady Fremantle were presented with the handles, made of oak and copper from the "Victory," which were attached to the cords operating the machinery used for lowering the figures.

**PROGRESS OF THE FUND.**—Presiding on 27th June at the annual meeting of the Society for Nautical Research, at the Royal United Service Institution, Admiral of the Fleet Sir Doveton Sturdee announced that over £69,000 had been subscribed in response to the appeal for funds to preserve the "Victory," but he wanted £80,000 before the end of the year. Sir Philip Watts said that they were aiming at a complete reproduction of the vessel as she went into action at Trafalgar. Steel masts and spars and iron rigging would be used. The masts would look exactly like the old wooden ones, and would last indefinitely.

**WELFARE CONFERENCE DECISIONS.**—On 26th June, decisions of the Admiralty on the requests put forward through the Welfare Conference of 1922 were promulgated. A considerable number of requests were directly or indirectly bound up with the question of accommodation on board H.M. ships. This question, the Admiralty stated, especially as regards the older ships, has become one of great difficulty, as the increasing demands on the limited space available tend to prejudice seriously the fighting efficiency of ships. A Committee is now going into the whole question, and the Board will give careful and sympathetic consideration to any measures which may be found possible for increasing the comfort of men, without impairing fighting efficiency.

**PRINCE GEORGE PROMOTED.**—H.R.H. Prince George, who had been a Midshipman since 15th January, 1921, and since 10th April, 1923, had been temporarily serving in the "Excellent," gunnery school, was on 26th June appointed as an Acting Sub-Lieutenant to H.M.S. "Victory," for Divisional and Submarine Courses at Portsmouth from 2nd July.

## FOREIGN NAVIES.

### COMPARATIVE STRENGTH.

**OFFICIAL RETURN.**—The Parliamentary paper, "Fleets (British Empire and Foreign Countries)," which for many years before the war was issued at the request of Sir Charles Dilke, was published on 17th May (No. 67), on this occasion at the instance of Vice-Admiral Sir W. Reginald Hall, M.P. The only new feature in the arrangement of the return was the inclusion of a new schedule of "Cruiser Minelayers," under which the British vessel "Adventure" was listed.

**NUMERICAL STRENGTH.**—In reply to a question in the House of Commons, the Secretary of the Admiralty, on 13th March, circulated the following figures giving the present strength of the principal navies:—

	France.	Italy.	United States of America.	Japan.	British Empire.
Battleships, Dreadnought type ...	6	5	20	7	18
Battleships Pre-Dreadnought ...	3	4	6	4	—
Battle Cruisers ... ..	—	—	—	7	4
Cruisers ... ..	6	3	10	—	2
Light Cruisers ... ..	5	10	10	15	48
Flotilla Leaders ... ..	1	8	—	—	16
Destroyers ... ..	50	51	316	71	186
Submarines ... ..	47	43	99	43	65

**DENMARK.**

**CRUISER EXPLOSION.**—On 25th May, an explosion occurred in the Danish cruiser "Geiser" during experiments with smoke-developing apparatus, and fifty persons were injured, sixteen seriously, including Captain Godfred Hansen, commanding the ship, who is an old Arctic explorer. The affair was the more serious because the captains and officers from other ships present were on board to witness the trials, and Commander W. Evers, Naval Attaché in London, was also admitted to hospital in Copenhagen suffering from burns.

**FRANCE.**

**TREATY RATIFIED.**—By 460 votes to 106, the French Chamber of Deputies on 7th July decided in favour of ratifying the Washington Treaty for the limitation of naval armaments, and four days later, the Senate, by 287 votes to three, decided in favour of a similar step. The other signatory Powers had already ratified the Treaty.

**GREECE.**

**BRITISH MISSION RETURNS.**—On 26th June, King George received at Buckingham Palace, Rear-Admiral Aubrey C. H. Smith, C.B., M.V.O., on relinquishing his appointment as Head of the British Naval Mission to Greece, which he had held since November, 1921, with the rank of Vice-Admiral in the Royal Hellenic Navy. On 21st June, Captain T. E. Wardle, D.S.O., who had been second-in-charge of the Mission, assumed command of the light cruiser "Calliope" as Senior Officer of the Reserve Fleet at the Nore.

**SPAIN.**

**CRUISER AT PORTSMOUTH.**—On 10th June, the Spanish cruiser "Cataluna," with a number of cadets on board under training, arrived at Portsmouth on a four days' visit. She went ashore in a fog off Selsey, and a destroyer and two tugs were sent from Portsmouth to her assistance. Later she was towed off undamaged. On leaving Portsmouth she was to call at other ports in Northern Europe, including Cromarty and Glasgow.

**SWEDEN.**

**SQUADRON VISITS ENGLAND.**—On 20th June, the Admiralty announced that a Swedish Fleet under the command of Rear-Admiral C. F. W. Riben, flying his flag in the "Sverige," and consisting of the 4th Battle Squadron, "Sverige" (Captain J. A. F. Eklund), "Drottning Victoria" (Captain A. Hägg), "Gustaf V." (Captain N. E. F. Selander), together with torpedo-boat destroyers "Wrangel" (Captain A. E. O. Giron) and "Wachtmeister" (Commander O. F. S. Warfvinge), would arrive at Sheerness on July 2nd, and leave for Rosyth 7th July, arriving at that place the following day. The cruiser "Fylgia" (Captain C. F. Tamm) was to accompany the squadron to Sheerness, and will then proceed to Gibraltar. It was arranged that the fleet would be met at Rosyth by Admiral Sir John de Robeck, Commander-in-Chief of the Atlantic Fleet, flying his flag in H.M.S. "Queen Elizabeth," and the First Battle Squadron. The Swedish Fleet was to leave Rosyth for Sweden on 11th July. The visit of the main portion of the Swedish Fleet to British ports is an event of note, for on no previous occasion has so large a force left its home waters. The honour of this visit is nowhere more appreciated than in the British Navy, which has ever had a fine regard for high seamanlike qualities, and in addition to this King Gustaf V. is an honorary Admiral of the British Fleet.

## UNITED STATES.

**CRUISER'S TRIALS.**—In May, the new light cruiser "Richmond" concluded satisfactorily her official trials. Designed for 33·7 knots, she was reported to have reached a speed of 34·3, and to have shown herself able to maintain a speed of 15 knots for 10,000 miles without refuelling. At 20 knots, she can steam 7,200 miles.

**ACADEMY PRACTICE CRUISE.**—Rear-Admiral A. H. Scales, in command of the Naval Academy Practice Squadron, composed of the "Arkansas" (flagship), "Florida," "Delaware" and "North Dakota," left Annapolis on 9th June for the annual cruise with the midshipmen. The programme included calls at Copenhagen, Greenock, Lisbon, Cadiz and Gibraltar. Altogether the ships were to cover 9,817 miles and spend 42 days at sea and 38 in port.

**NEW PROGRAMME.**—On 21st June, Mr. Denby, Secretary of the Navy, announced that the naval programme which Congress would be asked to approve for next year would consist of fifteen ships, including eight cruisers, four gunboats for the Chinese river patrol, and three cruiser-submarines. According to the *Army and Navy Journal* (New York), the new cruisers will be of 10,000 tons, as compared with the "Richmond" class of 7,500 tons, and the Navy Department has experimented sufficiently with the ten vessels of the latter type to be convinced that the 10,000-ton cruisers desired will have about twice the radius of action of the "Richmond" type.

**COMMAND CHANGES.**—A number of changes in high commands, to take effect up to the end of the year, were announced in April by the President, including the appointment of Admiral Robert E. Coontz to be Commander-in-Chief of the United States Fleet; Admiral E. W. Eberle to relieve Admiral Coontz as Chief of Naval Operations; Rear-Admiral S. S. Robison to relieve Admiral Eberle as Commander-in-Chief of the Battle Fleet; Vice-Admiral A. T. Long to relieve Rear-Admiral Thomas Washington as Chief of the Bureau of Navigation; and Rear-Admiral Philip Andrews to be Commander of the Naval Forces in Europe, in succession to Admiral Long. These and several other appointments were announced in advance to give the officers an opportunity to prepare for the changes. This was something of an innovation, but was expected to prove highly satisfactory to the Navy.

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MILITARY NOTES.

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## THE ARMY COUNCIL.

The following is the present constitution of the Army Council:—The Earl of Derby (President), Lieutenant-Colonel the Hon. Walter Edward Guinness (Vice-President), General the Earl of Cavan, Lieutenant-General Sir Robert Dundas Whigham, Lieutenant-General Sir Walter Campbell, Lieutenant-General Sir John Philip Du Cane, Mr. Rupert Sackville Gwynne, Sir Herbert James Creedy, Sir Charles Harris.

## APPOINTMENTS.

The following appointments have been made:—

General Sir G. F. Milne, G.C.M.G., K.C.B., D.S.O., to be General Officer Commanding-in-Chief, Eastern Command, from Lieutenant of the Tower of London, in place of General Lord Horne, G.C.B., K.C.M.G., dated 1st June, 1923.

General Sir F. J. Davies, K.C.B., K.C.M.G., K.C.V.O., A.D.C., to be Lieutenant of the Tower of London in succession to General Sir G. F. Milne.

Lieutenant-General Sir W. P. Braithwaite, K.C.B., to be General Officer Commanding-in-Chief, Scottish Command, in place of General Sir F. J. Davies.

Major-General Sir George Barker, K.C.B., to be Colonel Commandant Royal Engineers, *vice* the late Lieutenant-General Sir Henry Settle, K.C.B., D.S.O.

#### DRESS AT COURTS OR LEVÉES.

It has been officially decided that, during the present year, officers recently transferred to other regiments in consequence of the general reductions throughout the Army may, when attending Courts or Levées, wear the full dress uniform of their old regiments.

#### INSPECTORATE OF TANK CORPS.

The Army Council have approved of the formation of a Tank Corps Inspectorate at the War Office, and of its attachment to the Military Training Directorate of the General Staff.

#### DEFENCE AGAINST TANK ATTACK.

The weapons and organisation to be adopted for the close support of infantry and the defence of the forward infantry against tank attack have been under consideration. It has been decided to abolish the light (Stokes) mortar section, which forms part of the war establishment of an infantry battalion, and to introduce, as part of the divisional artillery, a weapon capable of carrying out both the above-mentioned tasks in war. This weapon will be at present the 3·7-inch howitzer.

A brigade of Pack Artillery will be added to the divisional artillery. It will consist of Brigade Headquarters and three batteries, each of four 3·7-inch howitzers. The two sections of each battery will be self-contained as regards officers, observation *personnel*, and signallers, thus enabling them to fight independently of each other when in action.

#### JUDGE ADVOCATE-GENERAL'S OFFICE.

*Inauguration of a Military Department.*—A military department of the Judge Advocate-General's Office was inaugurated on 1st July last with an establishment of one Colonel, one Lieutenant-Colonel, two Majors and two Captains. The main duties of this department are (1) to advise convening officers upon difficult questions arising in connection with proposed proceedings of courts-martial; (2) to provide, if necessary, a prosecutor at trials in intricate cases or where the accused is represented by civilian counsel, and in cases where the accused is not so represented, to advise as to the necessary steps to safeguard his interests; (3) to advise general officers upon legal questions arising in connection with the exercise of summary jurisdiction under the Army Act; (4) to advise general officers and colonels commandant upon legal questions arising in connection with important Courts of Inquiry, particularly those involving the investigation of public and regimental accounts; (5) to advise general officers and colonels commandants in connection with claims by members of the outside public against the military authorities, and to assist general officers immediately after an occurrence which may give rise to a heavy claim for compensation, by despatching an officer to take preliminary steps on the spot; and (6) to conduct periodical courses of instruction in the administration of Military Law.

For the present this arrangement will apply to Great Britain, the Channel Islands and Northern Ireland district only.



## JUDGE ADVOCATE-GENERAL'S DEPARTMENT.

In connection with the recent establishment of the Military Department of the Office of the Judge Advocate-General, an Army Order provides that an officer of this Department may be permitted to retire on retired pay after 20 years' service and to retire with a gratuity after 10 years' commissioned office. All officers of the Department will be retired at the age of 60, unless the Army Council deem it advisable to defer retirement until an age not exceeding 65; but no officer will be eligible for retired pay unless he has completed 20 years' service. The scale of gratuities will be: £1,000 after 10 years' commissioned service, £1,500 after 15 years, and £1,800 after 18 years.

## NEW DESIGNATIONS.

An Army Order states that in future a private soldier of the Cavalry of the Line will be designated "Trooper," and a private of the Foot Guards "Guardsmen." Similarly, it is laid down that a private of a Fusilier regiment will now be described as "Fusilier," and of a Rifle regiment "Rifleman."

## MOVES OF UNITS.

The following moves of units have been arranged for the trooping season 1923-24:—

Cavalry: 5th/6th Dragoons, from Egypt to India; 7th Hussars, from India to Home; 15th/19th Hussars, from Home to Egypt.

Royal Artillery: 10th (H) Battery, R.F.A., from India to Egypt; 43rd (H) Battery, R.F.A., from Irak to India; 14th Brigade, R.F.A., from Home to India; 18th Brigade, R.F.A., from India to Home; 1st Brigade, R.F.A., from Larkhill to Bulford; 25th Brigade, R.F.A., from Bulford to Larkhill; 3rd Brigade, R.F.A., from the Rhine to Deepcut; 8th Brigade, R.F.A., from Deepcut to the Rhine.

Infantry: 2nd Batt. King's Regiment, from Hong Kong to India; 1st Batt. Norfolk Regiment, from Home to Jamaica; 2nd Batt. Norfolk Regiment, from Aden to Home; 1st Batt. Suffolk Regiment, from India to Irak; 2nd Batt. West Yorks Regiment, from Irak to India; 2nd Batt. Leicester Regiment, from India to Egypt (Khartoum); 2nd Batt. K.O. Scottish Borderers, from Home to Egypt; 2nd Batt. Cameronians, from Irak to India; 1st Batt. Royal Inniskilling Fusiliers, from India to Irak; 1st Batt. East Lancashire Regiment, from Jamaica to Malta; 1st Batt. East Surrey Regiment, from Egypt (Khartoum) to Hong Kong; 1st Batt. Border Regiment, from India to Aden; 2nd Batt. Royal Sussex Regiment, from Malta (from Constantinople) to Singapore; 1st Batt. Dorset Regiment Home to Malta; 2nd Batt. Dorset Regiment, from Egypt to Home; 1st Batt. Loyal Regiment, from Malta (from Constantinople) to North China; 2nd Batt. Middlesex Regiment, from Singapore to India; 2nd Batt. Royal Ulster Rifles, from Egypt to India; 1st Batt. Argyll and Sutherland Highlanders, from India to Egypt.

## CITY OF GLASGOW REGIMENT.

An Army Order records the King's approval of the Highland Light Infantry being in future designated the Highland Light Infantry (City of Glasgow Regiment).

## ARMY PAY AND PENSIONS.

An Army Order supplementing the Pay Warrant provides for the grant of additional pay at £50 a year for a Company Officer superintending instruction in physical training.

By another amendment it is provided that, though service for pension forfeited by sentence of a court-martial, and all past service in cases of discharge with ignominy or for misconduct, etc., will not reckon as qualifying service for pension, the Army Council may, in deserving cases, allow the past Colour service, or such portion of it as they see fit, to reckon as qualifying service.

#### ADJUTANTS OF INFANTRY MILITIA DEPÔTS.

Officers now holding adjutancies of Infantry Militia (depôts) will now cease to be seconded and be absorbed into their regimental establishments when opportunity occurs. They may, however, continue to perform the duties of acting adjutant at their respective depôts. In future only lieutenants will be appointed acting adjutants at depôts. The appointment of assistant adjutant in battalions is abolished.

#### OFFICERS ON COURTS-MARTIAL.

An amendment to the King's Regulations provides that an officer will be required on first joining to attend for instruction all such courts-martial as the Officer Commanding the station may direct for at least two years from the date of his joining and for such further period as his Commanding Officer may consider necessary to fit him to act as a member of a court; and he is not to be nominated as a member of a court-martial, even if otherwise qualified, until his commanding officer deems him competent to perform so important a duty.

#### R.M.C. INSTRUCTION COURSE SHORTENED.

It is officially announced that the duration of the course of instruction at the Royal Military College, Sandhurst, is to be reduced from two years to 18 months. This shorter period will commence with the cadets who join the College in September next, and, as a result, the number available for commissions in 1925 and subsequent years will be larger than the number who are able to obtain commissions each year under the present system. The question of raising the lower age entrance limit from 17½ years to 18 is still under consideration. No change will be made, however, until June, 1924, at the earliest.

#### PROMOTION FROM THE RANKS.

It is announced in Army Orders that in the second of the special courses of training at Sandhurst, for candidates for promotion from the ranks to combatant commissions, commencing in January, 1924, provision will be made for 35 men. The number of vacancies available for subsequent courses will be announced in the Army Orders of April instead of May each year.

#### BOYS IN THE ARMY.

*New Scheme of Technical Training.*—A new development in Army service for boys is announced by the War Office. Hitherto boys have been enlisted for the most part as bandmen, trumpeters, buglers, drummers and pipers, although some have been employed as clerks and tailors, and some in the workshops of various branches of the Royal Artillery, the Engineers and the Tank Corps. The scheme now on foot provides for the technical training of boys in several trades, including those of electricians, wireless operators, fitters, carpenters and joiners. Ultimately places may be found for as many as 500 a year. For the first course of training which opens in September next there will be approximately 250 vacancies.

## LENGTH OF BOYS' SERVICE.

Boys enlisting into the Regular Army for training as bandmen, trumpeters, buglers, and pipers will serve nine years with the Colours and three in the Reserve. Boys enlisted for training as tailors and shoemakers will serve for 12 years with the Colours with no Reserve service, while those enlisted for training as tradesmen (other than tailors and shoemakers) in the Royal Horse and Royal Field Artillery and Royal Garrison Artillery, and for training as armourers and gunsmiths in the Royal Army Ordnance Corps, will serve for 12 years with the Colours as from reaching the age of 18, with no Reserve service. Boys enlisted as tradesmen, other than for the Royal Artillery and Royal Army Ordnance Corps, will serve eight years with the Colours and four years in the Reserve, as from reaching 18.

## RESERVE AND TERRITORIAL FORCES.

*Widows, Children and Dependants' Pensions.*—A new Royal Warrant provides that pensions and compassionate allowances may be awarded to the widows, children and dependants of officers of Militia, Special Reserve, Regular Army Reserve of Officers, Territorial Army of Volunteers, dying in consequence of wounds, injuries or disease directly attributable to the conditions of service, at the same rates and under the same conditions as to the widows, children and dependants of Regular officers.

It is further provided that if a soldier of the Army Reserve, Special Reserve, Militia, Bermuda Militia Artillery, Channel Islands Militia, King's Own Malta Militia, Royal Engineers (Militia) Malta Division, Territorial Army or Volunteers dies in consequence of wound or injury received in the performance of a military duty, or of disease directly attributable to service within seven years of the receipt of such wound or injury or of his removal from duty on account of such disease, his widow, children or dependants may be granted pensions at the rates and under the conditions laid down in the Pay Warrant so far as these are applicable.

Under the old Warrant no provision was made for the grant of pensions or compassionate allowances either to widows and children or dependants in the case of the death of an officer of any of these branches of the Service from disease attributable to service. The new Warrant provides for these cases. Its further effect is to place dependants of such officers and soldiers on the same footing as widows and children were under the old Warrant in the case of the officer's or soldier's death from injury attributable to service.

The new Warrant does not in any way affect cases arising out of the late War, which are dealt with by the Ministry of Pensions.

## TERRITORIAL ARMY.

*G.O.C.s and Their Commands.*—The following major-generals have now taken up the Commands of the Territorial Divisions to which they were recently appointed:

Major-General Sir G. P. T. Fielding, G.O.C. 56th (1st London) Division.

Major-General Sir P. P. de B. Radcliffe, G.O.C. 48th (The South Midland) Division.

Major-General Sir H. W. Hodgson, G.O.C. 44th (The Home Counties) Division.

Major-General A. A. Kennedy, G.O.C. 49th (The West Riding) Division.

Major-General A. B. Ritchie, G.O.C. 51st (The Highland) Division.

Major-General H. L. Reed, V.C., G.O.C. 52nd (The Lowland) Division.

Major-General C. C. Van Straubenzee, G.O.C. 46th (The North Midland) Division.

Major-General T. O. Marden, G.O.C. 53rd (The Welsh) Division.

Major-General A. Solly-Flood, G.O.C. 42nd (The East Lancashire) Division.  
Major-General Sir W. Thwaites, G.O.C. 47th (2nd London) Division.  
Major-General J. Duncan, G.O.C. 54th (East Anglian) Division.  
Major-General F. A. Dudgeon, G.O.C. 50th (The Northumbrian) Division.

#### TERMINATION OF COMMISSIONS.

An amendment of the Territorial Army Regulations provides that an officer who receives a commission in the Regular Forces will cease to hold his commission in the Territorial Army as from the day preceding his new appointment, and will have no claim to reinstatement in the Territorial Army should such commission in the Regular Army be subsequently relinquished. Similarly, if an officer of the Territorial Army obtains a cadetship at the Royal Military College or Royal Military Academy, his commission in the Territorial Army will be terminated as from the day preceding that on which he obtains his cadetship.

#### PROMOTION OF LIEUTENANT-COLONELS.

A substantive Lieutenant-Colonel who, after completing four years' service in that rank, is granted an extension of command, will, under a new provision in the Territorial Army Regulations, be promoted to the rank of Brevet-Colonel provided he has been selected for substantive promotion and would have been so promoted had an extension in command not been granted. On relinquishing command, he will be promoted to the rank of substantive colonel, with effect from the date on which he received promotion to Brevet-Colonel.

#### PROGRESS OF RECRUITING.

The latest returns of recruiting for the Territorial Army show that during 4th May, 175 men were finally approved for service, and that on the 1st June last the strength of the Army, exclusive of permanent staff, was 141,144. The net increase of strength during May (after allowing for the retirement of short-service men and losses from other causes) was 1,446.

The Western Command, which includes the Welsh Division and the two Lancashire Divisions, still heads the list for the present recruiting year with a total of 5,353 new enlistments, while the Northern Command, including the Northumbrian, West Riding and North Midland Divisions, stands second with 4,532; the Scottish Command third with 4,216; the Southern Command fourth with 3,669; the Eastern Command fifth with 3,637; and London District sixth with 2,939.

Among the Divisions the Welsh has taken premier place with a total strength of 9,598, and now requires only an addition of 103 officers and 870 other ranks to complete its peace establishment. The next best in order are the Northumbrian with a total strength of 9,494; the Highland with 9,280; the East Lancashire with 9,183; the West Lancashire with 8,920; the North Midland with 8,642 and the South Midland with 8,476.

#### GRANTS IN AID OF MESSING.

It is officially stated that the grants-in-aid of the cost of Territorial Officers' Messing will be continued during the present year, subject to the usual conditions. These grants are £1 for each officer who attends annual training in camp and 2s. a day for attendance at week-end camps and staff and instructional tours. The allowance of 2s. a day will also be given to officers when employed with advance and rear parties in connection with annual training in camp.

## TERRITORIAL CADET FORCE.

*Affiliation Scheme.*—The withdrawal of the grant formerly made through the War Office to assist the Territorial Cadet Force has necessitated a readjustment of the relations between that Force and the Military authorities. It has now been agreed that, in order to obtain the privilege of equipment for annual camps, &c., cadet units must be affiliated to Territorial units through the local Territorial Army Associations.

## OFFICERS AND O.T.C. UNITS.

Officers of the Territorial Army who are either University students or on the staff of a University or school may now be attached to an Officers' Training Corps unit or contingent, in order to carry out the drills required for efficiency. The annual musketry course and camp training of officers must, however, be performed with their Territorial Army unit. On the other hand, officers of the Territorial Army who are attached to units or contingents of the Officers' Training Corps to fill a vacancy in the establishment of the unit or contingent will be permitted to carry out the whole of their annual training with the unit or contingent to which they are attached.

Applications for attachment, together with the approval of the Officers Commanding the Territorial Army unit and the Officers' Training Corps unit or contingent concerned, will be forwarded through the usual military channels to the War Office for sanction.

## O.T.C. CAMP ALLOWANCES.

A grant of £1 will be issuable for the present financial year for each officer of the Officers' Training Corps and for each officer of the Regular Army appointed to the permanent staff of a Senior Division contingent of the Officers' Training Corps who attends annual training in camp. A similar grant will also be paid in respect of regular officers detailed to hold command or staff appointments at such camps, while an allowance of 2s. a day will be given to officers who are employed with authorised advance and rear parties in connection with the annual camp training of their contingents.

## INDIA.

Lieutenant-General Sir G. de S. Barrow, K.C.B., K.C.M.G., has been appointed Adjutant-General in India vice Lieutenant-General Sir W. S. Delamain, K.C.B., K.C.M.G., D.S.O., and Lieutenant-General Sir H. B. Walker, K.C.B., K.C.M.G., D.S.O., General Officer Commanding-in-Chief, Southern Command, India, in succession to Lieutenant-General Sir W. R. Marshall, G.C.M.G., K.C.B., K.C.S.I., who vacates his appointment on 12th November, 1923.

## DISBANDMENT OF UNITS.

Owing to retrenchment in the Indian Army the 43rd Madras Regiment, which was known till recently as the 83rd Wallajahbad Light Infantry, is shortly being disbanded. It was raised in Madras over a century ago. It was originally known as the 33rd Battalion of the Madras Native Infantry, and subsequently as the 1st Battalion 12th Regiment of Madras Native Infantry. After 1824 its name was frequently changed, till in 1921 it was given its present name.

The disbandment of the 2nd Kumaon Rifles, Bareilly, has also been ordered.



## INDIANISATION OF REGIMENTS.

The scheme for the Indianisation of eight selected regiments in the Indian Army by an annual increase in the proportion of Indian Officers borne on their establishments is making little progress owing to the disinclination of officers to transfer from other Corps.

The cases of twenty officers available for transfer have recently been under consideration. Eight of these passed through Sandhurst, of whom five declined to transfer from their present units, one was posted direct to one of the selected regiments, and two resigned their commissions before they had joined a unit. Two officers who originally held temporary commissions transferred when requested. Of ten Indore-trained Cadets, eight refused to transfer.

Thus of twenty officers originally available for the purposes of the Indianisation scheme, only three have agreed to transfer to the allotted regiments. Altogether seventy-nine Indians have received commissions, and of these sixty-nine are serving. Forty-three Indians have been admitted to Sandhurst, of whom thirteen failed to obtain commissions.

## INDIA GENERAL SERVICE MEDAL.

An Army Order provides that the grant of the India General Service Medal (1908) with clasp "Waziristan 1919-1921" will now be extended to the troops who occupied the Lower Zhob Posts (Brunj Safi, Mir Ali Khel and Mogul Kot) between the 12th November, 1920, and 23rd December, 1920, inclusive.

## NEAR EAST.

The Lausanne Conference resumed its sittings early in May last, and on July 9th an agreement, apparently satisfactory to both parties, was arrived at. It was then arranged that the evacuation of Turkish territory by the Allied Forces is to begin directly the Angora Assembly ratifies the treaty, and is to be carried out within six weeks of that time. Thus, the Allied Forces, which have now been maintained in and around Constantinople, the Dardanelles, and Chanak for close upon twelve months, may shortly be withdrawn. On July 12th, however, news was received from Lausanne that the Angora Assembly had declined to authorise its delegate, Ismet Pasha, to sign the agreement already arrived at without certain modifications, so that a definite settlement had not been finally reached.

## FRANCE, BELGIUM, AND THE RUHR.

In a case tried by French court-martial at Düsseldorf on May 11th last, when seven persons were tried, the charges were espionage, sabotage on the railway, and the shooting of a man who had worked for the French. One man was sentenced to death, another to penal servitude for life, three to terms of penal servitude for terms of from fifteen to twenty years, and the remainder to lesser terms of imprisonment. Herr Krupp von Bohlen and two other Krupp directors were sentenced by court-martial at Werden, early in May last, to fifteen years' imprisonment and a fine of 100 million marks.

Later on the French issued proclamations to the effect that all mines and works that do not deliver material demanded from them by the French may be either seized and run by the French occupying authorities, or the latter may hand these concerns over to concessionaires. Refusal of delivery makes the individuals responsible liable to fifteen years' imprisonment and a fine of 50 million marks. Persons guilty of sabotage in works so requisitioned are threatened with the death

penalty; and directors failing to prevent such sabotage, with imprisonment up to fifteen years and fines up to 150 million marks. Owing to the continued opposition on the part of the Germans, and in consequence to a deadlock having arisen, the British Government are, at the time of going to press, taking action in concert with the Allies and preparing a Note to send to Germany in the hopes of a satisfactory settlement in regard to reparations and the occupation of the Ruhr being finally come to.

### FRANCE.

#### THE FRENCH ARMY.

*Changes under the New Law.*—The reduction of the term of compulsory service from three years to eighteen months obviously reduced by 50 per cent. the number of Frenchmen serving with the colours. To compensate for this diminution of the standing army, units of the Colonial Army, including Algerian and other North African troops, will serve in France, and will be incorporated in French divisions or maintained as non-brigaded units as the exigencies of the moment may seem to require.

The Bill as it stands, therefore, abolishes to a certain extent the old distinction between the European French Army and the Colonial Army, which was composed mainly of French volunteers serving in French overseas possessions and the purely African Army. The Bill in its final form provides for 64 regiments of Infantry instead of 71, but the difference is made up by seven regiments of the "Coloniale," composed wholly of Frenchmen, which will serve in France. The Colonial Army will also supply to the garrisons of the mother country nine battalions of "machine-gun chasseurs," which will bring up the number of these battalions in France to 23. The number of Tank regiments, in the same way, is to be increased from 15 to 23.

*The Colonial Army.*—The recent recruitment law provides for a standing army in France and in her Colonies which must not in all exceed a strength of 550,000 men. The strength of the forces to be maintained overseas, exclusive of North Africa—that is to say, in Asiatic, Pacific, and other distant possessions of France—is put at 43,000 men, of which the Colonial Army will supply about 30,000 Infantry and 4,000 Artillery. Cavalry and auxiliary services will be recruited in the colonies themselves. The average force to be maintained in North Africa and the Levant will comprise 87,000 men of all arms, of whom the majority will be natives of North Africa. Provision is made for five regiments of foreigners, including Infantry, mounted Infantry, and Engineers, with a total strength of 12,000 men. North Africa will provide a further contingent of 60,000 men, to be brigaded in units which will serve in France. These troops, together with the French Regular Army, will bring the French standing Army in Europe, including troops in occupied Germany, to a total of 420,000 men.

*The French Cavalry.*—A regiment of French Cavalry is now fixed at 600 of all ranks. The squadron, 140 strong, consists of four troops, and each troop is made up of a number of independent squads which can be grouped together to form a *groupe de combat*. The latter consists of two *équipes* and one each of automatic rifles and bombers, each of six men, and the whole under a N.C.O. The troopers carry carbine, bayonet and sword. There are four squadrons to a regiment as well as a headquarter section, and two Hotchkiss sections. It is proposed to double the machine guns and make four sections of eight guns in all. This, of course, will mean a battery of Hotchkiss guns with each Cavalry regiment. The Cavalry is made up into six divisions of 5,000 men each. The gun portion of the division consists of 72 Hotchkiss guns, 16 machine guns, 12 guns of 37 mm. and 12 of 75 mm. The

total Cavalry force is 53 French regiments, 18 African regiments, one Foreign Legion regiment, and one of Arab and another of Senegalese.

*Reductions in the Army.*—In a Bill recently distributed to the members of the French Parliament a reduction of one-fifth in the number of officers in the Army as well as the disbandment of a considerable number of Cavalry, Artillery and Infantry regiments is provided for.

### RUSSIA.

#### THE RED ARMY.

At the beginning of 1923 the strength of the Army had fallen from 950,000 to 800,000; 150,000 belonged to non-regular formations. There are 280,000 men in the Infantry, 60,000 in the Cavalry, 70,000 in the technical units, and 30,000 in the Navy. The non-regular formations are occupied as follows:—The Che Ka's frontier units contain 50,000 men and its internal units 60,000.

The return of arms is as follows:—Rifles, 2,000,000; machine-guns, 14,500; light machine-guns, 5,700; cannon, 3,600; shells, over 3,000,000; small arms and munitions, one billion.

By an order of January 26 last the war establishment of a division consists of a total reckoned strength of 15,000 and 6,500 horses, comprising 3 Infantry regiments 3 squads of Cavalry, 3 batteries of field artillery, 3 howitzer batteries, and all the usual details—sappers, engineers, munition column, etc.

The Russians are reducing their army to 600,000, owing to economic causes, but the fighting efficiency will be increased. The reduction was due to a conference of military commanders held at Moscow 1st May. The conference worked out a remarkably simple and efficient scheme of reorganisation, which facilitates plans for mobilisation, reduces administrative machinery, increases the proportion of artillery to machine-guns, and purifies the corrupt supply service. The reorganisation, which is being rushed through, shows much energy and ability, and greatly increases the Army's efficiency.

The Red Army is devoting much attention to the Cavalry, being convinced that Cavalry will play a great rôle in the next war with Poland.

The Cavalry is the most efficient part of the army, and the superiority has recently been increased by changes enhancing fire and mobility by the reduction of the impedimenta and the increase of machine-guns. The old Cavalry division had 96 heavy machine-guns and no light ones; the new has 96 heavy and 96 light guns.

There was a similar doubling of machine-guns in the Infantry regiments.

### ITALY.

The troops in Cyrenaica, assisted by special battalions sent out from Italy, occupied Jedabia, the Senussi stronghold, on April 21st last. A flanking column also occupied Merj.

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## ROYAL AIR FORCE NOTES.

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As a result of the widespread interest shown throughout the country in the question of British Air Power, and in the importance of not allowing this country to fall behind others in aerial strength, all eyes have been turned towards the special Sub-committee of Imperial Defence which was appointed last March to consider these and other related problems. A statement as to the direction in which

their deliberations were leading them has been eagerly awaited, and satisfaction was expressed, both in Parliament and the Press, when, on June 26th, the Prime Minister definitely announced that it had been decided as an immediate step to augment the Royal Air Force Home Defence Squadrons from 18 to 52.

The past quarter has not introduced any circumstances which have involved the start of air operations in any new theatre, and the work of the Royal Air Force in training, development, and the maintenance of order overseas has had more opportunity to progress than during the preceding quarter.

## HOME COMMANDS.

### DEVELOPMENT, TRAINING AND ORGANISATION.

**LOW-POWERED MONOPLANE.**—A small power aeroplane, called the "Wren," built by the English Electric Co. for the Air Ministry and fitted with the normal 3 h.p. A.B.C. motor-cycle engine (398 cc.), has been carrying out test flights satisfactorily. The top speed of this aeroplane is approximately 52 m.p.h., and the landing speed approximately 23 m.p.h. It is hoped that low-powered aeroplanes such as this may reduce the cost of training pilots, and of full scale experiments with various wing sections and body forms; it is also a step towards the evolution of the "owner-driver's" aeroplane.

**HIGH-POWERED BIPLANE.**—In direct contrast to the "Wren" is the new 1,000 h.p. Avro bomber, which has recently carried out a series of successful flights. The aircraft proved to be easily manœuvrable and light on controls. The engine is the Napier "Cub."

**TROOP-CARRYING AIRCRAFT.**—One of this type, the "Vernon," has accommodation for twelve troops and their equipment, and is fitted with two Napier Lion Series II. engines. It has a speed of 106 m.p.h. at 2,000 feet and can climb to that height in 3 min. 26 secs. At cruising speed (approx. 90 m.p.h.) it has an endurance of 3½ hours at 3,000 ft. The second aircraft of this type, the "Awana," is designed to carry twenty-five troops and their equipment, or a considerable amount of spare parts for aircraft.

**FLYING BOAT FOR OPEN SEA RECONNAISSANCE.**—Considerable progress has been made with large flying boats designed to accompany the fleet as an integral part, and a successful flight has just been accomplished with the "Atlanta." This aircraft has an overall length of 67 ft. 6 in., a height of 30 ft. 6 in., and a span of 139 ft. 6 in. It is driven by four 750 h.p. Rolls-Royce Condor engines. The total weight of the aircraft, including crew of six and fuel, is 32,000 lbs. It is expected that it will develop 78 knots and be able to fly for 6½ hours. It is capable of remaining at sea for a considerable time.

**HIGH ALTITUDE CHAMBER.**—The construction of the high altitude test chamber at R.A.E. has been completed. This plant, which consists of a cubicle for the engine on test with suitable exhaust pumps and cooling apparatus, is designed to be capable of reproducing altitude conditions up to 30,000 ft, in the case of a 1,000 h.p. normal engine or 500 h.p. supercharged. It is hoped by means of this plant to study the performance of engines under high altitude conditions.

**R.A.F. STAFF COLLEGE, ANDOVER.**—The first course of 20 R.A.F. officers terminated at the end of March, and the second course commenced at the beginning of May with 20 Royal Air Force officers, 2 Navy, 2 Army, 1 Canadian and 1 Australian officer.

**R.A.F. CADET COLLEGE.**—It has been decided that in future the Cadets, before leaving this College, shall qualify as pilots on Service type aeroplanes.

**SCHOOL OF ARMY CO-OPERATION, OLD SARUM.**—The first of the new courses of three months each under the Revised Syllabus commenced on 15th May, at which 20 R.A.F. officers and 10 Army officers are attending.

**FLYING TRAINING.**—There are at present approximately 208 officers and 82 airmen under *ab initio* flying training at the various Flying Training Schools.

**COURSES.**—There are now courses being carried on in the undermentioned subjects :—

Flying Instructors' Course at the Central Flying School, Upavon.

Torpedo Course at Gosport.

Air Pilotage and Flying-Boat Flying at Calshot.

Deck Landing, using Gosport as a base.

Aerial Gunnery and Bombing at Eastchurch.

Signal Course at Electrical and Wireless School, Flowerdown.

Photographic Course at the School of Photography, Farnborough.

Engineering Course at R.A.E., Farnborough, Cambridge University, and the Imperial College of Science, London.

**R.A.F. AERIAL PAGEANT.**—The 4th Aerial Pageant was held at Hendon on Saturday, 30th June, at which all the largest types of aircraft were to be seen. The display was witnessed by Their Majesties the King and Queen, the Duke and Duchess of York and other members of the Royal Family, also by members of the Government, the Lords of the Admiralty, the Army Council, and Air Council. It is estimated that about 80,000 people were present.

**RESERVE OF AIR FORCE OFFICERS.**—Since the inauguration of the scheme in February last for the increase of the Reserve of Air Force officers by direct entry of ex-Royal Air Force pilots and civilian pilots from civil life the work of dealing with the numerous applications received has been steadily proceeding at the Air Ministry. So far only candidates for Classes A. or A.A. (pilots) have been dealt with, as it was decided to concentrate on the enrolment of the *personnel* for actual flying before dealing with applications for technical and other ground duties. Some 300 have been accepted and arrangements have been made for opening four civilian flying schools at London, Bristol, Coventry and Renfrew, for training these new entrants. Actual training was begun on the 1st of May last at the De Havilland Co.'s Aerodrome, Stag Lane, Hendon, and about 20 Reserve officers have completed a re-qualifying course in flying. This figure, of course, will increase proportionately as the schools get into full swing, which they should do by the beginning of next month (August).

**SHORT SERVICE COMMISSIONS DIRECT FROM CIVIL LIFE.**—The number of candidates for entry under the scheme is steadily increasing and the lists for entry for the courses starting in September are now full. In order to consider the candidate with special qualifications, who has been hitherto debarred by the age limit of 25, sanction has been obtained to raise the age limit in special cases to 30 years.

**NEW UNIFORM FOR R.A.F. CENTRAL BAND.**—His Majesty The King in March last approved a special uniform for the R.A.F. Central Band. Hitherto, unlike other Service bands, the R.A.F. wore merely the Service dress appertaining to the remainder of the Force.

**TRANSPORT VEHICLES FOR USE IN ROADLESS COUNTRY.**—As the result of experience in wet weather on the bad roads in the East, trials are being carried out with



track type Mechanical Transport vehicles, and there is every prospect of these trials proving successful, in which case consideration will be given to the equipment of R.A.F. Units overseas with this type of mechanical transport.

**MISSIONS TO GREAT BRITAIN.**—During the last quarter this country was visited by missions from the French and Spanish air Services. They were invited by the Air Ministry and were shown several Air Force stations and establishments.

#### NAVAL CO-OPERATION.

During the last quarter deck-landing training recommenced in H.M.S. "Argus." Numerous exercises were also carried out with the Atlantic Fleet at Portsmouth, Invergordon, and Portland. A change has been made in the organisation of units working with the Navy. Previously they were formed into squadrons, but to allow greater mobility, and to facilitate them being split into smaller units, the squadrons have been reorganised into permanent flights.

#### OVERSEAS COMMANDS.

##### IRAQ.

*(The last report described operations up to the end of March.)*

In the last report it was stated that a show of force was being made in the disturbed areas. It is now possible to give more detailed information.

During March the Air Officer Commanding decided to carry out combined air and ground operations as a means of showing the tribes in Kurdistan that we still possessed sufficient forces in the country to overcome any possible aggression from Sheikh Mahmoud and his backers. The combined operations were entirely successful and emphasised the value of aircraft in Iraq both independently and in close co-operation with ground troops moving through difficult and possibly unfriendly country.

As a result of the show of force the tribes in the Erbil, Rowanduz and Sulaimania districts are now free from anti-British propaganda and the prestige of the Iraq Government is high, particularly in the Erbil district.

It is interesting to note some of the many ways in which aircraft were used to great advantage.

On the 12th of March the Air Officer Commanding was able to visit personally the forces operating in the different districts. He travelled altogether some 530 miles by air and was then in personal touch with the whole situation.

During April it was decided that it would be more convenient to have an advanced Air Headquarters at Erbil, which is 200 miles from Baghdad. On the 17th the Air Officer Commanding, with a number of his staff and complete office organisation, proceeded from Baghdad to Erbil by air and remained there until the 26th—a quick move, with little or no disorganisation in office routine.

From this advanced headquarters the Air Officer Commanding was in personal touch with the Acting High Commissioner in Baghdad at three hours' notice and could obtain by dropped and picked up messages a report or appreciation from his ground forces in the same time.

Landing grounds were selected up to four days' march into the hills over ground which was impossible for wheels. By means of these either the Air Officer Commanding or one of his staff was able to discuss events personally with the officer commanding ground troops.

The troops were marching in two columns some distance apart and, when all other means of communication with them were impracticable, messages dropped and picked up by aircraft kept the Column Commanders in close personal touch with each other and with the Air Officer Commanding. This method proved in practice the superior even to W.T. in rapidity. Mounted air message sections were improvised. Air messages from the Columns to the co-operating aircraft were of unique value in ensuring that special information required in regard to dead ground, concealed positions, defiles and so on, was immediately furnished when otherwise considerable delay to the progress of the column and arduous work for the troops would have been occasioned to obtain it. Aircraft picked up in all some 120 messages. On one occasion the columns were enabled to make very rapid marches through very difficult country because closely co-operating aircraft obviated the necessity of piqueting the heights commanding their line of march. This increase in the mobility of the ground troops should prove a most important factor in future expeditions into mountainous country.

During the operations a large quantity of military stores were transported by air. On 21st April, 1,500 lbs. of rations were dropped at Benawi as a test. On 22nd April, 5,000 lbs. rations were dropped at Benawi. On 29th April, Canteen supplies amounting to 2,000 lbs. were sent to the Ground Troops by air; also 1,000 horseshoes and 5,000 horseshoe nails. As these air operations were carried out over 250 miles of most difficult forced landing country, and sometimes during extremely inclement weather, they are a considerable achievement.

On 28th and 29th April, 200 dysentery cases, which had developed during the return march from Rowanduz, were evacuated by air from Girde Tilleh to Baghdad, a distance of 260 miles. These cases must otherwise have had a six days' journey on donkeys and at least have suffered severely. One "Vernon" made a forced landing in most difficult country with the sick on board. A Medical Officer was skilfully landed at the machine by a Bristol Fighter, which also removed three of the more serious cases. The remainder were brought into Koi Sanjak on donkeys, whence they were evacuated by air to Baghdad.

### INDIA.

1ST MARCH TO 1ST JUNE.—The road to Razmak has been completed and the situation in this area is more or less quiet. During April Military operations were transferred to the Wana area and a column moved from Jandola to Sarwekai to cover the withdrawal of the Scouts from Wana, as their position was not too satisfactory. Aeroplanes co-operated in all these operations, but nothing of outstanding interest took place. The withdrawal was successfully completed, but anti-British activities still continue in Wana. During April the Jalal Khel completed their terms of settlement. This tribe was subjected to air action alone.

On the 21st April the General Officer Commanding Waziristan Force expressed his appreciation of the work done by the R.A.F. during the operations which terminated in the middle of April. During May the Chief Commissioner, North-West Frontier Province, expressed his appreciation of the immense moral effect produced on the Orakzai clan by the powerful Air Force demonstration on 8th May over the Tirah country. The demonstration paved the way for the success of the Jirgah which he held a few days later.

On the 1st June the situation was quiet and only one squadron was operating from an advanced aerodrome, carrying out reconnaissances and demonstrations. During March two machines forced landed in hostile territory.

On 3rd March a machine landed 15 miles west of Wana. Directly the machine crashed friendly tribesmen rushed forward and escorted the two occupants to Wana, fighting a rearguard action against some hostiles the whole way. The hostiles burnt the machine. On the morning of 12th March a machine landed in the Sang Toi River bed about one mile north of Sperkai. The pilot and observer were immediately taken in hand by some friendlies and rushed into a house. Here they were kept until 5.30 p.m., when, disguised as hillmen, they were escorted to Wana, where they arrived about 10.30 p.m. Whilst in the hut they heard an argument going on between two Mullahs as to what should be done to the prisoners. One Mullah favoured the reward, whilst the other, obviously hostile, favoured killing. Eventually the hostile one was promised a portion of the reward and was persuaded to depart. The movements of machines whilst bombing are carefully watched and remembered. On the way to Wana the pilot was taken aside and shown a village which had never been bombed and was inhabited by his captors' enemies. He was asked to make a point of bombing it when he next came over.

#### EGYPT.

THE CAIRO-BAGHDAD AIR MAIL service has continued to run with unflinching regularity. The operation of re-marking the route by ploughing and by the tracks of heavy motor transport has been carried out successfully in the Spring of this year.

#### CONSTANTINOPLE.

1ST APRIL TO 1ST JULY.—No operations have been necessary in this area other than routine reconnaissances of neutral zones. Training has been carried out, including co-operation with the Navy and the Army.

#### ADEN.

Owing to persistent depredations upon the trade routes by the Makhudmi and Mansuri, air operations were carried out against these tribes on the 14th, 15th and 18th May. The operations were completely successful, and both tribes surrendered on the 19th May.

#### PALESTINE.

The Political situation in Palestine is still unsettled, but no active disturbances have taken place. Sir Herbert Samuel arrived in England towards the end of June.

On the 15th May No. 14 Squadron R.A.F. held their annual Aerial Manœuvres at Ramleh aerodrome. About 8,000 spectators were present. The afternoon was a complete success, the arrangements being similar to those of the Aerial Pageant at Hendon. On the evening of the 10th June a party of British Gendarmerie was ambushed near Ain-el-Mellalah, at the north-west end of lake Hule, when returning to Roshpina after escorting the High Commissioner to Metullah. Our casualties were two killed, one died of wounds and two slightly wounded. The raiders fled into French territory and it was reported on the 16th that the French had captured the gang. On the 15th June Captain Swann, paymaster to the Gendarmerie, was shot dead by a gang of armed robbers. Press reports state that the leader of the gang was shot dead by a party of Gendarmerie a few days later.

**TRANSJORDAN.**

The Political situation in Transjordan is quiet, but agitation against the Government continues. The Reserve Force, Gendarmerie and Police have been unified and placed under the control of Peake Pasha, the whole force being now known as the Arab Legion. The Transjordan Government have accepted the conditions laid down in regard to the payment of the Grant-in-Aid. During the period 17th June to 20th June reports were circulated in the press that Wahabi raids were taking place in and round Kaf, but so far these have not proved serious. Aircraft have been operating to keep in touch with the Wahabi movements, but no active operations have taken place.

**MALTA.**

A long distance flight to Gibraltar by two flying boats was undertaken from this base on the 11th June. The outward flight was completely successful, the boats refuelling at Bizerta, Algiers and Oran; unfortunately at the last stage on the homeward flight one flying boat was forced to descend on the land at Bizerta just after having left the water. The second boat completed the return flight without incident.

H.M.S. "Pegasus" and H.M.S. "Ark Royal" still continue to operate near Constantinople, returning at intervals to Malta.

**CIVIL AVIATION.**

A study of the civil aviation in this country for the year ending March, 1922, and up to the present date has shown that the efficiency of the British Air Service has steadily increased. The British aircraft have gained a larger share of the Cross-Channel air traffic than for the previous year; out of a total of 5,137 flights and 13,172 passengers, 2,965 flights were made and 10,066 passengers were carried by British aircraft, representing percentages of 57.7 and 76.4 respectively.

**OPERATIONAL EXPERIMENT IN NIGHT-FLYING.**—Valuable data was obtained from the series of experimental flights by night which were carried out in February on the London-Paris route. In spite of the unfavourable conditions it was possible to confirm that night-flying on the route in the absence of fog and low cloud is as commercially practical as daylight-flying. Further experiments will be carried out to ascertain how the special difficulties of night-flying in adverse weather conditions may be overcome.

**THE DOMINIONS, INDIA AND THE COLONIES.**—The *Australian Commonwealth* Government has decided upon the immediate establishment of six trunk air lines, two of which are already being operated with success.

In *Canada*, the air services have been re-organised in connection with a Ministry of Defence, but the general policy of the Air Board which aimed at employing the air units to the maximum benefit of the Dominion is being continued. A wide range of duties, chief among which are the forest fire patrols and aerial photography, are carried out on behalf of other Government Departments and provincial Governments. The useful work carried out by commercial aircraft has increased considerably.

*India.*—The Indian Air Board are considering the organisation of the Calcutta-Rangoon route. The problem of forest survey has also been under consideration.

The *New Zealand* Government at present subsidises three companies and in addition work is found for the companies by giving refresher courses to Service pilots.

The *South African* Government are considering at present an Aerial Navigation Bill.

*Newfoundland*.—The Aerial Survey Company has accomplished much valuable pioneering work in connection with Seal Spotting, Aerial Survey, and the carriage of Mails.

INTERNATIONAL AIR CONGRESS.—The congress was held this year in London between 25th June and 30th June. The last day coincided with the R.A.F. Aerial Pageant at Hendon and this proved an excellent termination to a completely successful congress.

## AVIATION IN FOREIGN COUNTRIES.

### FRANCE.

AIR ESTIMATES.—The French Air Estimates for the financial year ending 31st December, 1922, were voted on 30th June.

Compared with the Votes for 1922 they show an increase of approximately 193,000,000 francs, of which 65,000,000 francs was inserted at the eleventh hour.

The greater part of the increases are for the benefit of the fighting Services and are mainly absorbed by increased charges for maintenance and wastage of material.

*Table of Sums Voted.*

				1923. Francs.	1922. Francs.
Army	...	...	...	414,234,118	280,300,802
Navy	...	...	...	105,540,081	37,318,543
Colonial	...	...	...	7,053,521	7,053,521
U.S. of S.	...	...	...	138,463,350	147,210,970
Total	...	...	...	<u>665,291,070</u>	<u>471,883,836</u>

EXPANSION OF NAVAL AIR SERVICE.—A Bill is now before the Chamber of Deputies which provides for the expansion of the French Naval Air Service to a total of 50 squadrons. It is proposed that this increase shall take place gradually until the final figure is reached.

The Bill, which forms part of a series of Bills dealing with the "Statut Naval," under which the whole of the Navy is to be re-organised, has not yet been discussed.

*Airships*.—The two rigid airships, "Dixmude" and "Méditerranée" (ex-German airships "L. 72" and "Nordstern") are being overhauled and fitted with new gas bags. On commissioning they are expected to carry out manœuvres and experimental flying with the Naval Air Force.

*Civil Flying*.—The organisation of the French Air Line from Paris to Constantinople has been completed.

A daily service now connects France with Capablanca (Morocco) and an extension of this line to Senegal has been decided upon. The French programme



for Colonial development also includes two new lines between France and North Africa, viz., Marseilles-Algiers and Antibes-Tunis by seaplane, and a line in Madagascar.

#### UNITED STATES OF AMERICA.

*Naval Aviation.*—Great importance is being attached to the use of aircraft on surface craft of the fleet. A programme has been drawn up with the object of fitting catapults to all classes of surface vessels. A very small single seater seaplane has been constructed which it is proposed to place on board a submarine.

*Endurance Record.*—On 16th and 17th April a World's endurance record was established on an American Army machine known as the "T.2." The machine flew continuously for over 36 hours. The same machine on May 2nd and 3rd flew without landing from an aerodrome in the vicinity of New York to San Diego, California.

*Airships.*—Two of the largest rigid airships in the world, the "Z.R. 1" under construction at Lakehurst, New Jersey, and the American Reparations airship "Z.R. 3" at Friedrichshafen, are now nearing completion. The former is expected to be ready for trials in August and the latter in September. If the trial flights are satisfactory, "Z.R. 3" may be flown across the Atlantic in the autumn. The Good-year Tyre and Rubber Company of Akron, Ohio, are building a large semi-rigid airship for the Army Air Service. This ship, when completed, is to carry out experiments as an aeroplane carrier.

#### JAPAN.

*Naval Air Service.*—Flying on and off trials have been carried out on board H.I.J.M. aircraft carrier "Hosho." In February, Captain Jordan, D.S.O., the test pilot for the Mitsubishi Company, made eight successful and one unsuccessful landings (the latter was due to the "Hosho" steaming about one point off the wind) with a Mitsubishi (300 h.p. Hispano-Suiza) machine. On March 13th, Major Brackley in a Vickers Viking machine landed twice on the "Hosho." For the first landing he was without passengers, and in the second he carried 400 lbs. weight representing passengers. Both landings were successful. Both Major Brackley and the Japanese authorities seemed well satisfied with the machine.

On March 14th Lieutenant Kira, I.J.N., made three successful landings with the same machine. He tried again on March 16th, but fell into the sea, the machine was wrecked, but the pilot was unhurt.

#### ITALY.

The Italian Royal Air Force is at present undergoing complete re-organisation, and is being re-formed into a separate Service, to be known as the Regia Aeronautica. The new organisation is based on similar lines to the Royal Air Force. Signor Mussolini is the High Commissioner for Aviation, Colonel Moizo is Director-General of Military Aviation, and Commendatore Mercanti is the Director-General of Civil Aviation.

#### RUSSIA.

The development of the Russian Air Force has been the subject of numerous articles recently appearing in the Press. High figures for machines and personnel have been quoted, with a programme of expansion on a large scale. While

the Soviet Government are undoubtedly endeavouring to establish their Air Force on Western principles, the question of finance is likely to curtail any excessive development, owing to the unsatisfactory economic condition of the country. Raw materials are scarce and practically all machines, spare parts, etc. have to be purchased abroad and sent to Russia, where they are assembled in the factories that are working. Maintenance of the Russian Air Force in any real state of efficiency will be difficult, owing to the large area over which units are scattered and the big distances intervening; but development is aimed at and may be expected.

#### PERSIA.

A Junker aeroplane arrived at Tehran from Russia, *via* Baku and Enzeli, on 12th April. The flight was supposed to be in connection with a new air route from Sweden through Russia to Persia, in which the German Junker firm are interested. The aeroplane landed alongside the racecourse while a race meeting was in progress. The Shah, who was present at the race-meeting, showed great interest in the Junker machine. The machine flew back to Baku on 14th April. This is the first aeroplane that has visited Tehran since 1921. The inhabitants of Tehran will soon have another chance of seeing an aeroplane, since it is proposed that two aeroplanes of the R.A.F. in Iraq shall fly to Tehran on a complimentary visit.

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## SOME FOREIGN SERVICE PUBLICATIONS.

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### MILITARY.

#### BELGIUM.

##### BULLETIN BELGE DES SCIENCES MILITAIRES.

*May.*—Operations of the Belgian Army (cont.). The infantryman's burden. Artillery support of attacking Infantry. Do we need Cavalry? (cont.). Pontoons.

*June.*—The strategic deployment and initial operations of the Russian Army in 1914. Further notes on the employment of guns in action. Do we need Cavalry? (cont.). Light armoured cars (cont.).

*July.*—The operations of the Belgian Army (cont.). The campaign of Sept.-Oct., 1916, in Transylvania (cont.). Policy in the preparation of a plan of campaign. Do we need Cavalry? (cont.). Light armoured cars (cont.).

#### FRANCE.

##### REVUE D'INFANTERIE.

*April.*—Infantry combat studies (cont.). British tanks, their past, present and future. Co-operation of Infantry and Artillery in the offensive (concl.). The Italian Infantry Training for 1922 (concl.). Operations conducted by the 319th Infantry Regiment about Vandy, 18th-30th Oct., 1918. Infantry fire during movement. Elements of military psychology. Operations in Morocco (cont.).

*May.*—The use of ground. The defence according to German views. The employment of armoured cars during the war. Battalion field firing—an Infantry section and a machine gun group. Elements of military psychology (concl.). Operations in Morocco (concl.).

*June.*—Operations as map exercises. The use of ground (cont.). The defence according to German views (concl.). The employment of armoured cars during the war (cont.). Physical training and military preparation.

*July.*—Essay on the distribution of machine guns in the attack. The use of ground (concl.). The new German Infantry training. Fire days of a battalion in action. Operations as map exercises (concl.). Operations in Morocco: the campaign of 1922. Physical training and military preparation.

#### REVUE DE CAVALERIE.

*May-June.*—The Cavalry division. Operations of large Cavalry bodies at the Mailly Camp (cont.). Cavalry and Aviation. Certain Cavalry operations on the Eastern front (cont.). Operations by the Spahis in the East (cont.). The work of the mounted arm. The pursuit: Mont St. Jean and La Bouteille.

#### REVUE MILITAIRE GÉNÉRALE.

*March.*—The proposed law on the re-organisation of the Army. The Marshals of France. The rôle of the High Command from an economic point of view from 1914 to 1921. The advance-guard on the Rhine.

*April.*—The breaking of the Dobro-Polé front. The rôle of the High Command from an economic point of view from 1914 to 1921 (cont.). A critical study of the provisional Field Manual for Infantry of 1920 (cont.). Allied strategy and operations in the north (cont.).

*May.*—The fatal quarrel between a Chancellor and an Admiral. The breaking of the Dobro-Polé front (cont.). The rôle of the High Command from an economic point of view from 1914 to 1921 (concl.).

*June.*—The mentality of the German. The Colonial War—Morocco. The fatal quarrel between a Chancellor and an Admiral (cont.). Considerations on the war of the future.

*July.*—Tallyrand and *la frontière ouverte*. Two attacks by a battalion in September, 1915. Study of the morale of the French Army during the war of 1914-1918. Allied strategy and operations in the north (cont.).

#### GERMANY.

##### HEERES-TECHNIK.

*April.*—Theoretical observations on the "life" of gun tubes and small-calibre barrels (cont.). The use of ferries, bridges and fords by mechanically propelled vehicles. The railways in the defensive battle of the Aisne. Shrapnel.

*May.*—Theoretical observations on the "life" of gun tubes, etc. (cont.). The influence of sun-rays on the useful employment of telescopes. Railways in the defensive battle of the Aisne (cont.). Thoughts on the armament of a company of Infantry. Nancy-Camp des Romaines-Novo Georgievsk (cont.). A survey party on the Eastern Front in the first 18 months of the war.

**MILITÄR-WOCHENBLATT.**

No. 30. The Artillery in the second period of the war of movement. The organisation of the German Army in the Great War, by General v. Zwehl. New drill formations. No. 31. *Nauticus redivivus!* The Artillery in the second period of the war of movement (cont.). The problem of the infantry fire-weapon. No. 32. Sordet's Cavalry Corps in the war of movement in Aug. and Sept., 1914, by General v. Kuhl. Singapore, the new naval base. The infantry fire-weapon. Speed in the attack. No. 33. The torpid German General Staff. French railways during the war. For Right, Justice and Peace. No. 34. The action at Montdidier, 8th August, 1918, by General v. Kuhl. The final battle in Macedonia in 1918. The torpid German General Staff.

**SWITZERLAND.****REVUE MILITAIRE SUISSE.**

*April.*—Ludendorff's strategy (concl.). Inter-communication between guns and infantry. Emigration and national defence. Remarks on mountain artillery.

*May.*—The operations of General Sordet's Cavalry Corps in Belgium in August, 1914. Aviation and chemical warfare. The communication service in an infantry battalion.

*June.*—The operations of General Sordet's Cavalry Corps in Belgium in August, 1914 (concl.) A tactical scheme for an infantry company. Cavalry and other mobile arms in co-operation.

**NAVAL.****FRANCE.****LA REVUE MARITIME.**

*April.*—Baudin in Australian waters. Protection against submarine attack. The Navy and the Oil Council. The operations of the 19th August, 1916, in the North Sea.

*May.*—Delcassé and the Navy. The Battle of the Falklands. Baudin in Australian waters. The automatic steering of ships.

*June.*—Rigid airships for naval use. The Battle of the Falklands (concl.). Pierre Zédé, founder of the naval museum at the Louvre.

**LA VIE MARITIME.**

*April.*—British naval airships and our naval programme. The Port of Tangiers. *A propos* of aviation. Lord Birkenhead's attacks on the *Entente*. The occupation of the Ruhr and the navigation of the Rhine. New York liners. About the Channel Tunnel. The Petrol War.

**GERMANY.****MARINE RUNDSCHAU.**

*April.*—War conducted by other methods. The transport of troops by sea in the Great War (concl.). Contributions to the history of the second and third Anglo-Dutch naval war. The basis of the Prusso-German naval organisation.

1835-1914. Sanitation and Hygiene. My Life: Cruiser warfare 1870-71, by Vice-Admiral Valois.

*May-June.*—Observations on the foundations of naval policy of the Great Powers. The question of the northern "Straits." Contributions to the history of the second and third Anglo-Dutch naval war (cont.). Exploration and charting work in the danger zone during the war. *Nauticus redivivus!* Remarks on Commander Giles's book, "What happened at Jutland," by Admiral Valois.

#### ITALY.

##### REVISTA MARITTIMA.

*February.*—Some letters from Admiral Nelson to the Duke of Savoy, 1799-1805. The development of the Whitehead factory during the war. Some problems of our coast defence. The battle of Tannenburg and the Masurian Lakes.

*March.*—Recent developments of radio-telegraphy. Civitavecchia and its port.

*April-May.*—Review of Corbett's "History of the Naval War." Problems of naval aviation. Radio-telegraphy and the Naval operations of the War. The navigation of the Danube. Massowa and its port.

### PRINCIPAL ADDITIONS TO THE LIBRARY.

May—June—July, 1923.

THE TRAGEDY OF CENTRAL EUROPE. By E. Ashmead-Bartlett, C.B.E. 21s. 8vo. London, 1923.

MY MISSION TO RUSSIA AND OTHER DIPLOMATIC MEMORIES. By the Rt. Hon. Sir George Buchanan, G.C.B., etc. 2 vols. 30s. 8vo. London, 1923.

HANDBOOKS FOR THE INDIAN ARMY. Rajputana Classes. Compiled under the orders of the Government of India. By Major B. L. Cole. 8vo. Simla, 1923. (Presented by the Publishers.)

THE DEVELOPMENT OF THE BRITISH EMPIRE. By H. Robinson. 12s. 6d. 8vo London, 1923.

THE LIFE OF LIEUT.-GENERAL SIR J. M. GRIERSON, K.C.B., C.V.O., C.M.G., A.D.C. By D. S. Macdiarmid, B.A., LL.B. 18s. 8vo. London, 1923.

ADVENTURES IN THE NEAR EAST, 1918-1922. By Lt.-Colonel A. Rawlinson, C.M.G., C.B.E., D.S.O. 25s. 8vo. London, 1923.

LA GUERRE EN ACTION, UN COMBAT DE RENCONTRE : NEUFCHÂTEAU, 22 AOÛT, 1914. Par Commandant A. Grasset, D.S.O. 8vo. Paris, 1923. (Presented by the Author.)



- NOTES ON THE LAND FORCES OF BRITISH DOMINIONS, COLONIES AND PROTECTORATES (EXCLUSIVE OF INDIA). (Official). 8vo. (H.M. Stationery Office). London, 1923. (Presented by the Secretary, War Office.)
- AMERICA AND THE ATLANTIC. By Vice-Admiral G. A. Ballard, R.N., C.B. 10s. 6d. 8vo. London, 1923.
- MONTCALM AT THE BATTLE OF CARILLON (TICONDEROGA), JULY 8, 1758. By Capt. M. Sautai. Illustrated. 8vo. (Printed for the Fort Ticonderoga Museum). (Presented by S. H. P. Pell, Esq.)
- RIDERS OF THE AIR. By A. Corbett-Smith. 6s. 8vo. London, 1923.
- TACTICAL PRINCIPLES AND PROBLEMS. By Capt. H. E. Hanna. 8vo. U.S.A., 1910. (Presented by Major-General W. H. Greenley, C.B., C.M.G.)
- OLD DIPLOMACY AND NEW, 1876-1922. FROM SALISBURY TO LLOYD GEORGE. By A. L. Kennedy. 18s. 8vo. London, 1923.
- THE RIFLE BRIGADE CHRONICLE FOR 1922. Edited by Major H. G. Parkyn, O.B.E. 8vo. (J. Bale, Sons and Davidson). London, 1923. (Presented by the Committee of the Rifle Brigade Club.)
- A SCIENCE OF INFANTRY TACTICS SIMPLIFIED. By Capt. B. H. Liddell Hart. 5s. 6d. 8vo. (William Clowes & Sons, Ltd.) London, 1923. (Presented by the Publishers.)
- THE DECISIVE BATTLES OF MODERN TIMES. By Lieut.-Colonel F. E. Whitton, C.M.G. 12s. 8vo. London, 1923.
- LA CAMPAGNE DE BRUIX EN MÉDITERRANÉE, MARS-AOÛT, 1799. Par Lieut. de Vaisseau G. Douin. 8vo. (Société d'Éditions). Paris, 1923. (Presented by the Publishers.)
- HISTORY OF MODERN EUROPE, 1878-1919. By G. P. Gooch. 21s. 8vo, London, 1923.
- THE TRIUMPH OF UNARMED FORCES (1914-1918). By Rear-Admiral M. W. W. P. Consett, C.M.G., assisted by Capt. O. H. Daniel, R.N. Illustrations and diagrams. 15s. 8vo. (Williams & Norgate). London, 1923. (Presented by the Publishers.)
- DEUTSCHLANDS KRIEG IN DER LUFT. General V. Haepfner. 8vo. Leipzig, 1921.
- A DESCRIPTIVE CATALOGUE OF THE NAVAL MANUSCRIPTS IN THE PEPYSIAN LIBRARY AT MAGDALENE COLLEGE, CAMBRIDGE. Edited by J. R. Tanner. Vol. iv. Admiralty Journal. 8vo. Printed for the Naval Records Society, 1923.
- NATIONAL POLICY AND NAVAL STRENGTH, XVI. TO XX. CENTURY. By Rear-Admiral H. W. Richmond, C.B. 8vo. Published for the British Academy by H. Milford (Oxford University Press), London, 1923. (Presented by the Publishers.)
- GENERAL FREDERICK YOUNG, FIRST COMMANDANT OF SIRMUR BATTALION (SECOND GURKHA RIFLES). THE LIFE-STORY OF ONE OF THE OLD BRIGADE IN INDIA, 1786-1874, INCLUDING REMINISCENCES OF IRELAND AND OF INDIA IN THE FIFTIES. By L. H. Jenkins. Illustrations. 8s. 8vo. London, 1923.

AN ALPHABETICAL ABRIDGMENT OF THE LAWS FOR THE PREVENTION OF SMUGGLING, 1816. 8vo. London, 1816.

APPENDIX TO ABOVE. 8vo. London, 1818.

AN ALPHABETICAL ABRIDGMENT OF THE LAWS FOR THE PREVENTION OF SMUGGLING. 8vo. London, 1821.

(The three books mentioned above are presented by Commander A. F. St. Clair Armitage, R.N.)

THE DEVELOPMENT OF INTERNATIONAL LAW AFTER THE WORLD WAR. By O. Nippold. 7s. 6d. 8vo. (Clarendon Press.) Oxford, 1923. (Presented by the Delegates of the Clarendon Press.)

AN AMBASSADOR'S MEMOIRS. Vol. I. By M. Paléologue. 18s. 8vo. London, 1923.

GAS WARFARE. By E. S. Farrow. 8vo. New York, 1922.

JOURNAL OF A RESIDENCE IN ASHANTEE. By J. Dupuis. Illustrations. 8vo. London, 1824. (Presented by Major-General G. G. A. Egerton, C.B.)

MARÉCHAL SAXE. By Captain Mark Sykes. Extract from *The Green Howards Gazette*. 8vo. N.P., N.D. (Presented by Major-General G. G. A. Egerton, C.B.)

The following seven books have been presented by Lady Corbett:—

BRITAIN'S GLORY, OR SHIP-BUILDING UNVEILED, BEING A GENERAL DIRECTOR FOR BUILDING AND COMPLEATING THE SAID MACHINES. By W. Sutherland. Folio. London, 1717.

SEESPIEGEL. By W. I. Bleau. Folio. Amsterdam, 1649.

DE NEDERLANDSCHE SCHEEPS-BOUW-KONST OPEN GESTELT. By Cornelis van Yk. Folio. Amsterdam, 1697.

LE PETIT NEPTUNE FRANÇAIS, or FRENCH COASTING PILOT. 3rd Edition. Revised by J. F. Dessiou. Folio. London, 1805.

NAVAL, MILITARY AND POLITICAL AFFAIRS IN EUROPE AT THE COMMENCEMENT OF THE FRENCH REVOLUTION. By H. Clarke. 3 Vols. Folio. Bungay, 1816.

ADMIRAL HOLBURNE'S LETTER-BOOK. Portsmouth, 1759-1764. 2 Vols. Folio. MSS. N.P.

ATLAS MARITIMO DE ESPAÑA. Folio. Madrid, 1789.

COSTUMES MILITAIRES: CATALOGUE DES PRINCIPALES SUITES DE COSTUME MILITAIRE FRANÇAIS. Par un Membre de la Sabretache. 8vo. Paris, 1900. (Presented by Viscount Dillon, C.H.)

THE DEFENCE OF INDIA. By A. Vincent. 3s. 8vo. (Oxford University Press.) London, 1922. (Presented by the Publishers.)

DICTIONNAIRE DES TERMES MILITAIRES ET DE L'ARGOT POILU. 8vo. Paris, 1916. (Presented by Viscount Dillon, C.H.)

- EXPRESSIONS D'ARGOT ALLEMAND ET AUTRICHIEN. Par R. Delcourt. 8vo. Paris, 1917. (Presented by Viscount Dillon, C.H.)
- JANE'S ALL THE WORLD'S AIRCRAFT, 1923. Edited by C. G. Grey. £2 2s. 8vo. (Sampson Low, Marston & Co., Ltd.) London, 1923. (Presented by the Publishers.)
- THE IRISH GUARDS IN THE GREAT WAR. Edited and compiled from their diaries and papers by Rudyard Kipling. Maps. 2 Vols. 40s. 8vo. (Macmillan & Co., Ltd.) London, 1923. (Presented by the Publishers.)
- THE 47TH LONDON DIVISION, 1914-1919. By some who served with it in the Great War. Edited by Major A. H. Maude, C.M.G., D.S.O. Illustrations and Maps. 18s. 8vo. (Amalgamated Press.) 1922. (Presented by the Editor.)
- THE STORY OF THE "9TH KING'S" IN FRANCE. By E. H. G. Roberts. 8vo. Liverpool, 1922. (Presented by Lieut.-Colonel G. P. Ranker.
- "INVICTA." WITH THE 1ST BATTALION THE QUEEN'S OWN ROYAL WEST KENT REGIMENT IN THE GREAT WAR. By Major C. V. Moloney. Maps and Illustrations. 15s. 8vo. London, 1923.
- A CONCISE HISTORY OF THE YORK AND LANCASTER REGIMENT. By A. A. Payne. 3s. 6d. 8vo. London, 1922.
- THE HISTORY OF THE 5TH ROYAL IRISH REGIMENT OF DRAGOONS FROM 1689 TO 1799. AFTERWARDS THE 5TH ROYAL IRISH LANCERS FROM 1858-1921. Compiled by Colonel J. R. Harvey, D.S.O., completed to 1921 by Lieut.-Colonel H. A. Cape, D.S.O. Illustrations and Maps. 42s. 8vo. (Gale and Polden, Ltd.) Aldershot, 1923. (Presented by the Publishers.)
- WAR RECORD OF THE 2ND CITY OF EDINBURGH BATTERY (1ST LOWLAND BATTERY, R.F.A. "C" BATTERY, 86TH ARMY BRIGADE.) 8vo. Glasgow, 1923.
- THE ROYAL NAVAL DIVISION. By D. Jerrold. 21s. 8vo. London, 1923.
- THE HISTORY AND RECORD OF QUEEN VICTORIA'S RIFLES, 1792-1922. Maps and Illustrations. 15s. 8vo. (Constable & Co.) London, 1923. (Presented by the Publishers.)
- HISTORY OF THE 6TH BATTALION, WEST YORKSHIRE REGIMENT. Vol. I, 1/6TH BATTALION. By Captain E. V. Tempest, D.S.O., M.C.
- VOL. II. 2/6TH BATTALION. By Captain E. C. Gregory. Illustrations and Maps. 8vo. (Percy Lund, Humphreys & Co., Ltd.) Bradford, 1923. (Presented by Lieut.-Col. J. H. Hastings, D.S.O., O.B.E.)
- HISTORY OF THE MANCHESTER REGIMENT (LATE THE 63RD AND 96TH FOOT). Compiled by Colonel H. C. Wyllie, C.B. Vol. I, 1758-1883. Illustrations and Maps. 8vo. (Forster Groom & Co., Ltd.) London. (Presented by the Regimental Committee.)
- The following Books, formerly the property of Field Marshal Sir George Nugent, Bart., G.C.B., have been presented by Capt. Sir E. C. Nugent, Bart., D.L., J.P. :-
- REGULATIONS FOR THE USE OF TROOPS UPON THEIR ARRIVAL IN THE WEST INDIES. 2 Vols. 8vo. London, 1795.
- REGULATIONS RESPECTING DESERTERS. 8vo. London, 1801.

INSTRUCTIONS RELATIVE TO THE BAGGAGE AND MARCHES OF THE ARMY. 8vo. London, 1797.

INSTRUCTIONS RELATIVE TO THE BAGGAGE AND MARCHES OF THE ARMY ON HOME SERVICE. 8vo. London, 1801.

REMARKS ON THE DEFENCE OF IRELAND (SINCE 1798). 8vo. N.P., N.D.

LETTER FROM MARQUIS CORNWALLIS TO THE RT. HON. H. DUNDAS ON THE BEST MODE OF NEW-MODELLING THE ARMY IN INDIA. Folio. London, 1794.

OBSERVATIONS ON THE ATTACK OF MUD FORTS. By an Officer of the Bengal Army. 8vo. Calcutta, 1813.

Also a very large number of letters and documents dealing with the various Commands that Field Marshal Sir George Nugent held from 1795-1814. These, when arranged and indexed, will be placed in the Manuscript Room.

## NOTICES OF BOOKS.

**The Triumph of Unarmed Forces.** By REAR-ADMIRAL M. W. W. P. CONSETT. (Williams and Norgate.)

This book will come as rather a shock to those who have accepted blindly the statement that the preparations for war were more complete than those of any previous war, and that the "blockade" was resolutely and ably applied. Admiral Consett maintains, and supports his opinion with figures, that it was not. It was, he thinks, in our power to apply such economic pressure to Germany that her collapse must have come about earlier. "The leverage," he says, "that the control of our own supplies gave us, had it been combined with a knowledge of the needs and the resources of other nations, was a weapon that could not have been resisted. There is probably no case in history in which the economic forces at the disposal of a nation on the outbreak of war have been so great as those that this country held in August, 1914."

Admiral Consett's view is that we wholly failed to realise before the war, or until the war had been in progress for a long time, the prodigious strength we as an Empire possessed; and, worse than that, even when this strength was realised, that we deliberately failed to make use of the knowledge. The first of these contentions is certainly borne out by the account of the preparation for war given by Mr. Churchill, in which there is not the smallest indication that any study was made of how to make use of our combination of sea power, manufactures and sources of supply; nor any indication of a recognition of the fact that a war in which sea power takes a part, in the manner in which British sea power always has taken a part, must be long. In a long war the resources of any country must become exhausted, however well provided she may begin, however well dowered in natural resources she may be. She must procure material from abroad; and some of that material must, at some stage of its travel, cross the sea.

In spite, however, of these facts, which stand out as elemental in the history of the great wars of this country, the nineteenth century showed a steady process of abandonment of rights essential to the exercise of our strength. This process Admiral Consett traces. But he shows that we still possessed the means of exercising pressure, if we did but choose to make use of it, in spite of the Declarations of Paris

and London. "By the exercise of maritime rights we could and we did stop a certain proportion of Germany's supplies: with America's good-will we could have stopped a larger proportion; but we also held a very powerful weapon in our hands which international law could not touch, a weapon more potent than the fleet, though useless without it: this was the weapon of economic advantage."

It is to this thesis of economic advantage that Admiral Consett directs his attention. We commanded the supplies of materials essential, directly or indirectly, to the enemy. They came from our own country or from our dominions; or they were brought from overseas by means of our coal. They were sent, in their thousands of tons, to the neutrals bordering on Germany, and from thence either in their original form or transformed, went into Germany to assist her to continue her resistance. The indictment is a serious one. It is supported by figures, by conversations, by evidence collected under particularly favourable conditions. There is, however, one missing point: what proportion do the figures that he shows went into the country form of the total requirements of Germany?

Admiral Consett makes a survey of the various imports by which Germany was kept alive, her armies supplied and her people fed. As an example, he says that Denmark, before the war, exported 60 per cent. of her produce to this country, and 25 per cent. only to Germany. But during the years 1915 to 1918 the quantity that came here fell off by over 300,000 tons, while over 400,000 tons increase went to Germany. "Denmark was Germany's larder." Yet her agricultural industry depended for its existence upon oversea supplies, of which not the least important was coal. Coal was wanted for the railways to transport the supplies, for gas works, for electric light and power stations, for manufacturers of lard and dairy produce, for meat and fish preserving and tinning, for breweries and oil mills. This coal was supplied from England. To the claim that if it had not been sent Germany would have furnished it, the author replies that the German coal is useless for some of the purposes, bad for all; and that even if it had been supplied, German miners would have had to win it; and those miners could not have been in the army. Every demand made upon the German civil population to provide the needs for the army was a drain upon man power: and it was a double drain. The German was set free to go to the German ranks; the Briton was taken from the ranks to the coal mines. The coal, too, provided by-products of high importance in the manufacture of ammunition. To ration these neutrals with coal was, therefore, a direct means of preventing them from assisting the enemy with the products of all kinds that depended upon its supply. This was eventually ordered; but the injury had already been done; it was not until 1917 that effective reductions were made.

It is not possible to follow Admiral Consett throughout his long and searching analysis of the manner in which Germany was permitted to receive supplies or the means of procuring them. Agricultural produce, fish, explosives, lubricants, metals, fertilisers, cement, tea, coffee, cocoa, binder twine, are treated in turn; but as we remarked earlier, we are not given the proportion of the whole of Germany's consumption that these figures represent.

Admiral Consett's views have met with criticism on the ground that if Great Britain exercised her undoubted right of embargo of her own produce, and by agreement that of the Dominions, to the countries acting as supply bases, the same supplies would have been furnished by America. How far this would have been possible is a proper matter for study before coming to a conclusion on this question. It is also argued that as Great Britain went to war in defence of small nations she could not, with any pretence of morality, proceed to squeeze small nations. This, however, begs a question. Great Britain did not go to war in defence of small nations but in defence of herself, just as in earlier centuries she went to war with the France



of Louis XIV., Louis XV., the Republic and Napoleon. No one who is not blind can fail to see that the destruction of France, the capture of the French colonies, and the incorporation of the Low Countries in the German Empire could only be a first step towards the destruction of this country's maritime power, and therefore of this Empire. The argument that we could not exercise pressure by the municipal act of embargo because we were at war to defend the rights of small countries falls wholly to the ground, for the premise is wrong.

If the "Triumph of Unarmed Forces" does but draw attention to the prodigious part played by economic forces in war, and the need for the most penetrating study of the whole question of resources, imports and exports, it will have served a valuable purpose. Without such study sea power is robbed of its strength. We strongly commend the study of Admiral Consett's book.

**The Defence of India.** By "ARTHUR VINCENT." (Humphrey Milford—Oxford University Press.)

One result of the Great War has been the enhanced interest taken in Empire Defence, which has led at home and abroad to the realisation that the safety of India is of vital importance for the maintenance of the Empire communications. Though much has been written on India and its problems of defence, there is no book which puts these problems so concisely as does that under review. This is written with the object of bringing before the public the dangers that are ever present to India both from within and from without. The author deals with these fairly and without trying to appear as an alarmist, but at the same time convinces one that the word "Prepare" should be written on the office walls of all those whose duty is the direction of Indian policy and the preparation of her defence.

The book is divided into three parts, of which that dealing with the special problems of the North-West Frontier receives its due proportion of space. Nevertheless, the author very rightly points out that, though all eyes are at present turned to the North-West, the time may not be so far distant when the aspirations of an awakened and united China may cause the focus point to be altered to the North-East. In discussing the relative values of the "Backward" and "Forward" policies in the North West, the author clearly lays before the reader the arguments advanced by both schools of thought, but, in advocating the "forward" policy, he does not lay sufficient stress on the undoubted benefits that would accrue to the tribes from a general and continuous policy of peaceful penetration, as proven by the results of the Sandeman administration in Baluchistan. The volume does not deal with the detailed line of conduct to be followed by the military authorities in executing the declared policy of Government, but, even without this, it should be read by all Military Officers whether it may be for examination purposes or to assist in formulating intelligent opinions on the Indian Defence problems. Much that appears important is omitted, but this does not detract from the value of a book that aims at brevity in dealing with the main problems without sidetracking into minor ramifications.

**The Reformation of War.** By COLONEL J. F. C. FULLER, D.S.O. (Hutchinson).

The previous writings of the author naturally lead one to expect an interesting and original book, and the reader will not be disappointed. The further one reads the better it is, but the key to the book is given in the author's own words: "Through years of contact with my fellow men I have learnt that it is by

exaggeration that man's mind is aroused, for of the meticulously proportioned, man takes little heed."

Of the Author's main points we may agree with him at once that warfare has not yet come to an end, for, as he says, "a war to end war is as absurd as a peace to end peace." We also agree that he has proved his case that chemical warfare has come to stay.

The main point with which we cannot agree is that war on the nerves of the civil population alone, can bring victory; and that killing will no longer be necessary. Colonel Fuller states that "towards the close of the War it became apparent to some that science was so powerful that it could even dispense with the age-long custom of killing, and could do something far more effective—it could petrify the human mind with fear." This idea appears to be based chiefly on the increasing use of mustard gas, which is to a great extent non-lethal. The value of this gas, however, did not lie in the fact that it was non-lethal, but in that it happened to be the most effective persistent gas then in existence. If it had been possible to make whole areas uninhabitable for days with a lethal gas it is idle to suppose that any idea of humanity would have prevented its use.

The following illustration of his point appears to lack any appreciation of the wonderful moral qualities displayed by the civil populations of all the leading countries in the Great War. He says: "I believe that, in future warfare, great cities, such as London, will be attacked from the air, and that a fleet of 500 aeroplanes each carrying 500 ten-pound bombs of, let us suppose, mustard gas, might cause 200,000 minor casualties, and throw the whole city into panic within half an hour of their arrival. Picture, if you can, what the result will be! London for several days will be one vast raving Bedlam, the hospitals will be stormed, traffic will cease, the homeless will shriek for help, the city will be in pandemonium. What of the Government at Westminster? It will be swept away by an avalanche of terror."

If this is a true picture, traditional British phlegm must be considered in a new light!

Fear may be inspired by the unknown, but once the results of non-lethal gases are realised, we cannot believe that the fear inspired will be out of proportion to the results which can be produced. To underestimate the spirit and determination of your enemy is surely the most dangerous of all errors, and having seen how hard it is to defeat a modern civilised enemy after inflicting appalling casualties upon him, it is surely unwise to count on beating him without inflicting any fatal casualties at all. As Colonel Fuller himself says, "in the recent war over four years were required wherein to undermine the German *morale*; and in the days of Napoleon it took twenty-two years to undermine that of the French," and yet he now expects to do it in a few hours and without killing a man!

The author does not foreshadow the arrival of any new weapons, but foresees great developments in the latest of those which we already have—tanks, gas, and aeroplanes.

As an expert in tanks, he carries the development of this weapon perhaps further than any other. "Man," he says, "is an encumbrance on the battlefield." He is merely a "weapon-mounting of one-eighth horse-power energy." Looked at in this light, a machine can no doubt be superior; but his case for the tank, good though it is, is spoilt in places by overstatement.

Although a tank can and does leave the roads to fight, if one looks closely at any landscape in this country, it is difficult to believe that the day will come when large forces of tanks, supplied with caterpillar wagons, will habitually carry out their normal marches on a broad front entirely independent of roads. But this is

what Colonel Fuller claims, for he says "we must scrap roads and railways, the traditional means of movement, and move over areas—that is, straight across country—like ships over the sea." And when he compares the conditions of July–November, 1916, with those of July–November, 1918, showing that there were 5,277 casualties per square mile of ground gained in the former period, against 86 per square mile of ground gained in the latter period, and suggests that the sole reason was that only in the latter period were tanks used efficiently, it is difficult to acquit him of being deliberately misleading.

In dealing with aeroplanes he makes a good point of the great difficulty of using Air Forces on Imperial Police work. Commenting on a suggestion for continuous day and night bombing, put forward by "a well-known Wing Commander," he says, "would the above eminent officer walk into an Oriental harem and rip the women and children up with a kukri? He would not, and yet he suggests burning them alive or blowing them to pieces. Why does he do so? The answer is because he talks like one in the air and not like one on the earth; he talks like an owl hooting over the city."

In another very interesting passage dealing with the combined use of tanks and aeroplanes Colonel Fuller draws a picture of a force of tanks and armoured caterpillar supply wagons advancing through the Khyber Pass from Peshawar to Kabul, supplied by aeroplanes as soon as the force has cleared the Pass. If it were practicable, what a gloriously simple and effective operation it might be!—no crowning of the heights to protect the force moving up the valley, and no vulnerable line of communication to be kept secure. Unfortunately an absolutely necessary condition of success is that the enemy is armed with nothing larger than a small bore rifle. And what of the Afghan artillery? If only half a dozen guns can be concealed in the rocky mountain sides, in places inaccessible to tanks, the whole idea falls to the ground!

In spite of the fact that many of the suggestions put forward are obviously impracticable, the book is stimulating and original, and the author's habit of throwing his mind forward, and not back, is a valuable object-lesson in itself.

Perhaps one of the most interesting chapters in the book is that in which he turns to the study of treaties and world conditions to-day, which bears the title of "The Peace which passeth understanding." Although he is ready to condemn practically all those who have been responsible for the recent arrangement of the world's affairs, it is clear that he still has faith in the British soldier; for he says—"He is a man who possesses such natural pride of birth that, through sheer contempt for others, he refuses to learn or to be defeated . . . he has, in fact, raised the vice of contempt to a high virtue, and on this virtue is the British Empire founded."

#### SOME REGIMENTAL HISTORIES.

**The Irish Guards in the Great War.** By RUDYARD KIPLING. (Macmillan and Co., Ltd.)

If the Irish Guards have been especially favoured in securing the services of so well known and so popular a writer as Mr. Rudyard Kipling as their regimental historian, he also has been exceptionally fortunate in having been able to obtain the use of so many private diaries and letters from which to piece together the record of their services in their first great war. The Army and the British public have come to expect that the Guards will always do well both in peace and in war, and that those regiments will under all conditions set a high standard of conduct which all

other units may emulate; and in the Great European War the Guards lived up to their high reputation, while the Irish Guards were no whit behind their older comrades of the rest of the Brigade.

When the war began in August, 1914, there was in existence but the one battalion of the Irish Guards, and this formed, under the mobilisation scheme, part of the 4th (Guards) Brigade, 2nd Division, and was landed in France exactly nine days after the declaration of war, but even then arrived at the front no more than in time to assist in covering the retirement of some of those units already falling back from Mons. At Villers-Cotterêts the Battalion suffered its first serious losses of the war, and thenceforward the history of the Irish Guards is the story of the four years' war on the western front. The 1st Battalion fought at the Aisne, at the first battle of Ypres, at Loos, on the Somme, again at the third battle of Ypres, at Cambrai, and ended up the final victory march almost on the very spot where those who left England with it heard for the first time the thunder of the German guns. The 2nd Battalion, which was formed in July, 1915, was in France a month later, joining the Guards Division then in process of creation and entering the war at Loos. Thereafter the 2nd Battalion fought at Ginchy during the Somme Battle, at Third Ypres and at Cambrai, and won undying honour in the Battle of the Lys.

To the early training at the dépôt, in regard to the particular stringency and methods of which there has been much ignorant criticism, the Guards owed the maintenance under all possible and impossible conditions of the discipline for which these troops are famous; the Irish Guards began the war as an essentially Irish regiment, and though, as the war went on, it became necessary to replace wastage by English drafts, still, unlike the county regiments, the Guards received the drafts which had been trained for them—no one from the beginning to the end of the war ever saw a Guards' draft going to any other unit. The historian of the Irish Guards has told their story from the regimental point of view and illuminates his text with remarks and comments made by the men themselves about all they saw and suffered; while the whole story, linked together by Mr. Kipling's own wonderful sympathy with and knowledge of the British soldier, is told in language and phrase that will endure.

The two volumes are admirably mapped, and they will make appeal equally to those who served and to those who in the years to come may join the Regiment.

**Regimental Records of the Royal Welch Fusiliers.** By A. D. L. CARY and CAPTAIN McCANCE. (Forster Groom and Co., Ltd.)

The first volume of this history appeared in 1921 and recorded the life of this ancient regiment from its creation in 1689 to the close of the Napoleonic wars; the second volume was published in February of this year and carried the record to the eve of the Great War, the events of which will be narrated in a third volume now in preparation. The history of the Welch Fusiliers is an epitome of the history of the British Army during the last 340 years, since by land and sea, as soldiers and marines, they have fought wherever the British Empire was being made or maintained. The Regiment fought with Dutch William in Ireland, it was at Namur, and served in all the campaigns of Marlborough; it was employed in the war of the Austrian Succession, and under Granby in Germany during the Seven Years' War. Quartered in America when the War of Independence began, the Royal Welch Fusiliers served throughout from the initial engagement at Lexington to the capitulation at Yorktown, and thereafter took part in nearly every one of the campaigns against the

forces of Revolutionary and Imperial France. To have brought the recital of so vast a series of events within the compass of a volume of some 300 pages, without undue compression, is certainly something of a *tour de force*.

The second volume deals with a more peaceful period; Waterloo was followed by nearly 40 years of tranquillity, but the Welch Fusiliers were engaged in the two wars which immediately followed, and greatly distinguished themselves in the Crimea and in the Indian Mutiny. After another considerable interval the Regiment again saw service in Ashanti, later again in Burma, on the N.W. frontier of India, in South Africa and China, and all these many happenings are described in very considerable detail and yet with a very just sense of proportion.

Officers and men have good reason to be satisfied with the story of the long and stormy life of the Royal Welch Fusiliers as set out in these volumes. The arrangement, giving an account of each battalion by year in turn, has occasionally the effect of causing serious interruption to the narrative, while the maps—there is, indeed, only one of any size in the two volumes—may to some seem hardly adequate; but there are a number of interesting portraits and several colour plates in both volumes depicting important incidents in the life of the Regiment.

**History of the 5th Royal Irish Lancers.** By COLONEL J. R. HARVEY, D.S.O.  
(Gale & Polden: Aldershot.)

This is a very interesting and well-written history. The illustrations are good and the type easy to read. The maps would be better placed after the whole of the text to which they refer, and inserted so as to open clear of the text.

Apart from its purely regimental interest, which is great, the history is a record in miniature of the evolution of the British Cavalry in particular, and the British Army in general. It also gives a considerable amount of Irish history. The different types of Cavalry action, the "flank attack" at the Boyne, the "pursuit" after Ramillies, etc., are well illustrated. The reader is kept well informed throughout of such matters as progress in Barracks and Quarters, systems of inspection, sale of commissions and age of officers, pay, pensions, discipline and punishments, military dress and establishments, the supply of arms and development in armament, such as pistols, swords, hand grenades, gas and flame, machine guns, etc. Developments in transport, equitation and riding schools, bands and regimental standards, and variations in cavalry formations, the three-rank formation and rally, are not forgotten. Greater detail as to where the men were recruited from time to time would be of interest. A series of well-placed anecdotes keeps up the reader's interest and prevents the history from becoming a bare, hard record of events.

The regiment owes its origin to the activities of James II. in Ireland in 1688, and was formed, with the help of officers and arms from England, out of bands of Enniskillen Protestants. On 1st July, 1690, the regiment distinguished itself at the Battle of the Boyne, being personally led in a charge by King William. The regiment was employed in Flanders from 1694-7, when it returned to Ireland, where it was scattered in eight places by troops. It is interesting to read that from 1st May to 1st October it was the custom to turn out the horses to grass, under a small guard, and train the regiment in dismounted work.

In 1702 the Regiment went to Holland, and in 1704 took part in the famous march into Germany under Marlborough, culminating in the French defeat at Blenheim. In 1706 the Regiment distinguished itself at Ramillies, and was permitted to wear Grenadier caps in memory of its destruction of the Picardie



Regiment. In 1708-9 the Regiment was present at the battles of Oudenarde and Malplaquet. From 1713 to 1799 the Regiment was in Ireland. Some 33 pages of Chapter V. are devoted to the 1797-8 Irish Rebellion. Though, from the point of view of purely regimental history, this portion might have been considerably compressed, and details of other periods inserted, for which the reader is referred to Willcox's "History of the Regiment," nevertheless it makes very interesting reading. During the rebellion the regiment was never employed as a whole, but in small scattered detachments, and maintained its reputation under trying and difficult circumstances. The latter portion of Chapter V. is devoted to a discussion of the causes which led to the disbandment of the regiment in 1799. Throughout the rebellion the 5th Royal Irish Dragoons had been employed under the most trying conditions, and searching test of discipline, namely, in a civil war and in small detachments, and came through the ordeal well. As late as 31st August, 1798, there was no idea of disbandment, as the regiment was ordered to be converted into Light Dragoons. The decision to disband was made as the result of very serious charges brought against the regiment by the Lord-Lieutenant, Lord Cornwallis, in a letter dated 1st January, 1799. There appears to be no known documentary evidence existing to bear out these charges. It seems, and this opinion was expressed in the "British Military Library" of April, 1800, that the decision was largely influenced, if not originated, by political intrigue, and the severity of the punishment meted out was quite unjustified.

The regiment was re-embodied, by order of Queen Victoria, in 1858. In 1863 they proceeded to India, round the Cape, taking well over 100 days. They returned to England in 1874, and Ireland in 1881. In 1884-5 detachments from the regiment took part in the Nile and Suakim expeditions. In 1898 the regiment proceeded from India to South Africa, taking part in the South African War, 1899-1902, which included a very successful charge at Elandslaagte, and the siege of Ladysmith. Details are given of the 1914 incident in Ireland, which brings out the inherent dangers of any use of the Army to further political aims, where the soldier's undoubted rights and duties as a citizen, when employed in aid of the civil power, which are never lost sight of in Military Law, are brought into direct and dangerous conflict with the orders of superior authorities. In August, 1914, the regiment went to France, and distinguished itself throughout the War on this front, at Mons, the Marne, the Aisne, Ypres and other engagements, finally re-entering Mons on 11th November, 1918.

Those who think the useful days of Cavalry are past would do well to study this part of the book, which shows that this was far from the case, even in the least promising theatre for the Mounted Arm, the Western Front.

**The 47th (London) Division, 1914-1919.** Edited by ALAN H. MAUDE.  
(Amalgamated Press, Ltd.)

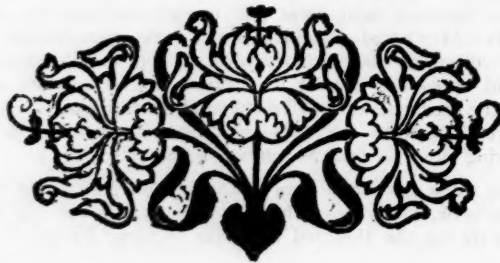
The 47th Division was originally known as the 2nd London Division and was one of the Territorial Divisions which had been formed in April, 1908, out of the old Volunteer Force under the Haldane scheme of army reorganisation. When war broke out the artillery of the division had already completed its annual training, but the remaining units had only just arrived at their camps on Salisbury Plain and were at once recalled to London to complete their mobilisation. This concluded, the division was concentrated in the St. Albans area, and had the advantage of a full six months' training under the best possible conditions before proceeding

to France at the end of March, 1915. The 46th and 47th Divisions were the two first Territorial Divisions, as such, to fight in France; other Territorial battalions and units had gone thither earlier attached to regular formations. But these two Territorial Divisions proceeded and fought there on their own, and none in the whole British army have established and maintained a finer record.

In 1915 the Division was engaged at Festubert, at Givenchy and at the Battle of Loos; in 1916 at Vimy Ridge, the Somme and in the Ypres salient; in 1917 at Messines and in the bitter winter fighting at Bourlon Wood; and in the last year of the war at Cambrai in the spring, in the summer fighting, and in the triumphs of the Hundred Days.

The story of the four years' struggle in the plains of France and Flanders is described, and well and adequately described, by some of the survivors of those who took part in it, and Mr. Maude has ably collated all these different accounts. Londoners who study these pages must be filled with pride when they read of the achievements and enduring valour of London Regiments, and the record here provided will certainly not be without its effect upon the future of those soldiers upon whom in the days to come the Great City will call to fill the ranks of the old Second London Division.

The book tells us of all arms of the Division; it is well produced and illustrated, and adequately mapped; while the appendices contain much information which helps to complete an excellent record of great deeds.





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